

## VII. ARCHAEOLOGICAL RESEARCH QUESTIONS

### A. Introduction

This section first reviews the archaeological research questions that have guided previous archaeological investigations of New Castle and Kent county farms, tenant farms, and farm laborer house sites. The general framework outlined in the **Management Plan** (De Cunzo and Catts 1990) appears first. Then, for each study period of this historic context, 1830-1880 and 1880-1940, specific research questions posed by Delaware archaeologists are presented. These are drawn from the **Management Plan**, from the Route 13 Bypass/Delaware Route 1 planning studies, from Custer, Catts, and Coleman's 1986 discussion of future research directions for Delaware historical archaeology, and from the reports on individual New Castle and Kent county farm, farm tenancy, and farm laborer house sites explored intensively and reported on to date.

Finally, based on a synthesis of the foregoing, the results of the research undertaken to prepare this historic context, and discussions among Delaware historical archaeologists, additional archaeological research questions and issues are proposed to guide future research on property types associated with this context.

Delaware's **Management Plan** for historical archaeological resources (De Cunzo and Catts 1990) identified four principal research domains for historical archaeological research over the next five years: Domestic Economy, Manufacturing and Trade, Landscape, and Social Identity, Behavior, and Interaction. The following presents those aspects of each appropriate to the study of the state's 1830-1940 farms and farm workers' house sites (De Cunzo and Catts 1992).

#### Domestic Economy

Historical archaeological investigations have focused over the years on the domestic residential site for several reasons. Domestic sites are ubiquitous, archaeologically visible, and in fact usually quite rich. More important, archaeologists, anthropologists, and historians have become increasingly cognizant of the centrality of the family/household as the basic social unit of production, reproduction, and consumption (cf. Beaudry 1984; Deetz 1982; Mrozowski 1984). Furthermore, the household represents the minimal social and economic unit generally visible archaeologically. Domestic economy studies form an essential basic component of both historical ethnographic research and investigations of the international capitalist system's development, the broadest subject of historical archaeological inquiry (Deagan 1988; Schuyler 1988; South 1988). Finally, domestic economy as a research domain interests historical archaeologists of all theoretical orientations.

Domestic economy encompasses the whole range of means (which include production, reproduction, and consumption) employed by the family/household to achieve its goals (Rapp 1979: 176). These goals may be mere survival and/or family continuity; they may include geographic, occupational, economic and/or social mobility; and they are inspired by religious beliefs and values and/or other ideologies. Thus, the family/household's production, reproduction, and consumption may be viewed as a strategy designed to achieve domestic goals, a strategy subject to historical archaeological investigation. Particular elements that historical archaeologists have explored include the household's composition and the roles of its individual members (cf. Deagan 1983; De Cunzio 1987; LeeDecker et al. 1987; Yentsch 1990), home production (of food, shelter, clothing, and other basic necessities as well as of marketable surplus products) (cf. Bowen 1988; Carlson 1990; Turnbaugh 1985; Yentsch 1988), and consumer behavior (see especially Spencer-Wood 1987). This last topic is intended to be broadly defined to encompass investigating the family/household's participation in a local production and barter economic system and/or in a cash-based market economy. Relevant research issues include the family/household's investment in, use of, and improvements to land, buildings, tools and equipment, servants and slaves, livestock, and domestic furnishings. In addition, status/display goods and behaviors are subject to archaeological investigation--in particular the domestic landscape, architecture, consumer goods, and social behaviors such as entertaining in the home. Finally, the roles of fashion, style, and ideology in the domestic economy--including religious beliefs, world view, ideas on nature, beauty, the family, etc.--are also subject to examination.

Once the subject family/household's domestic goals and strategies have been reconstructed, analysis moves to a larger context. The family/household must be understood in the context of the local and regional economic, social, occupational, ethnic, religious, and political systems. Comparisons can be made across three major dimensions: time, space, and social position. For example, the extent of urbanization and industrialization, the nature, efficiency, and extent of the transportation system, and the nature of marketing systems and their effects on the availability of goods and services all vary over time. Spatial comparisons can be made within a single community, among similar and different communities within a geographic region, among rural, small town, and urban communities, and among different geographic regions. Comparisons across social position relate family/households of different ethnic affiliations, religious backgrounds, occupational structures, points in the life cycle, household types, income levels, and socioeconomic statuses. Thus, farm households and the households of rural, town-based, and urban laborers, craftspeople, merchants, professionals, and business-owners can all be investigated and compared by the archaeologist for evidence of similarities and differences in their domestic goals, strategies, and their material correlates. Developing

sophisticated means of conducting this multivariate comparative analysis and interpretation remains one of historical archaeology's great challenges.

### Manufacturing and Trade

Historical archaeologists study manufacturing and trade principally through site types other than residential sites, although overlap occurs in the areas of agriculture, home production, and consumer behavior. Several aspects of manufacturing can be explored by archaeologists at production sites. There is, of course, first the physical site--location and land use, alterations made to the landscape, architecture, and any other engineering and structural features (cf. Faulkner 1982; Hardesty 1988; Starbuck 1986).

Production processes have also proven amenable to archaeological study (cf. Faulkner 1986; Hardesty 1988; Heite 1990; Honerkamp 1987; Light 1984; Pendery 1985; White 1980, 1981, 1983; Worrell 1985). The remains of tools and equipment, raw materials, and finished products are often preserved in the archaeological record. These, in conjunction with the physical site evidence, allow historical archaeologists to better understand technology and production processes and their evolution. Finally, all production sites serve also as workplaces. Therefore, archaeologists can explore work patterns and practices, and worker-employer relations (cf. Beaudry 1989a, 1989b; Beaudry and Mrozowski 1987a, 1987b, 1988; Deetz 1963; Gorman, Jones, and Staneko 1985; Ingle 1982; Leary 1979; Levin 1985).

As with the study of domestic economy, the research program ends not with the individual site, but with cultural context and comparison. The site can be placed in a settlement context through study of the distribution and interrelationships among not only production sites but all the site types composing the local and regional settlement and economic system (Langhorne 1976). At the same time, factors such as the ethnic and cultural background of the farmer can be considered as they relate to the process and technology employed at the site. Finally, the study of change across time and space encompasses not only investigating the evolution of process and technology at any individual site. The archaeologist also seeks explanations for changes in the worker's position as producer and consumer, and explanations for changes in the interrelationships among workers and their employers and among production, transportation, and marketing.

The research domain of trade links the study of production with the study of the domestic economy. Domestic sites inform on what people did in fact acquire and from what sources. Ultimately the research goal is to reconstruct the structure, functioning, and evolution of Delaware's production, distribution, and consumption systems.

## Landscape

Studying the cultural landscape involves looking at the human settlement system and its relationship to the natural environment. Analysis may proceed on a number of different levels, including national, regional, sub-regional, local, and site-specific. At all levels beyond the site-specific, research focuses on the physical manifestations and interrelationships among frontier (cf. Lewis 1984), rural (cf. Paynter 1982), town/nucleated (cf. Heite and Heite 1986a; Miller 1988), and urban settlement systems (cf. Cressey and Stephens 1982; Rothschild 1987; Wall 1987). At individual sites, archaeologists seek to reconstruct the natural and cultural environment (cf. Beaudry and Mrozowski 1987a, 1987b, 1989; Kelso and Beaudry 1990), the division and use of space (cf. Beaudry 1986; Pogue 1988; Stewart-Abernathy 1986), and to understand architectural forms and their placement (cf. Carson et al. 1981).

Clearly this research domain intersects the others identified in the **Management Plan**. At the domestic site, for example, the use and manipulation of the landscape can be explored as an aspect of the household's economic strategy as well as in its relationship to ethnic identity, religion, and political, social, economic, and occupational status and goals (cf. Adams 1990; Beaudry and Mrozowski 1987b; Epperson 1990; Leone 1973; Leone et al. 1989; Stewart-Abernathy 1986; Yentsch et al. 1987). Similarly, the cultural landscape of a production site results from the interaction of a complex network of factors. Technology and the farmer's cultural/ethnic background, traditional knowledge, economic means, social status, and aspirations are all played out in the physical site. Furthermore, the farmer's views on his or her relationship to and responsibility for the workers, and his or her "world view" or beliefs concerning nature, human relationships to it and potential dominance over it all take material form in the cultural landscape (cf. Beaudry 1989a; Beaudry and Mrozowski 1988). Finally, as with the other research domains, the cultural landscape must be studied as a phenomenon exhibiting stability as well as undergoing change across time and space.

## Social Group Identity, Behavior, and Interaction

Archaeological study of social groups intersects with the other research domains, yet also requires investigating site types not identified with the other domains. Family and kinship, ethnic identity and behavior, religious beliefs and associations, community ties, and political, social, economic, and occupational groups may all be investigated to a certain extent at the level of the family/household residential site (cf. Deagan 1983; Faulkner and Faulkner 1987; Geismar 1982; Kelso 1984; Leone 1973; Leone et al. 1989; McGuire 1982; Orser 1990; Otto 1984; Praetzelis, Praetzelis, and Brown 1987; Reitz and Scarry 1985; Schuyler 1980;

Singleton 1985; Spencer-Wood 1987; Staski 1987). Similarly, the social groupings associated with the workplace may be explored at farm sites.

Investigation of social group identity, behavior, and interaction can appropriately occur within the context of the community. Of course, one can define a community in many ways and at many demographic and geographical scales. Nevertheless, communities always comprise kin, household, religious, occupational, political, and social groups interacting within a defined geographic area. Interacting communities form larger political and cultural systems. Thus by utilizing this proposed framework, historical archaeologists in Delaware can contribute to the study of the family/household, the social group, the community, and ultimately the politico-cultural system. (The preceding has been abstracted from De Cunzio and Catts 1992).

The first statement of a proposed research design for the Route 13 By-pass/ Delaware Route 1 corridor appeared in Custer and Bachman, **An Archaeological Planning Survey of Selected Portions of the Proposed Route 13 Corridor, New Castle County, Delaware** (1986) (see also Custer and Cunningham 1986). It did not distinguish research questions separately for the two time periods considered here. The following presents those aspects of the proposed research design relevant to this historic context.

Most of the Route 13 corridor has been, and continues to be, an important agricultural area. The roots of that livelihood provides a focus for inquiry. For example, little is known about the lower class of non-landed tenant farmers. Few of their dwellings survive and the historical record makes little reference to the role played by this group in the rural society. Most known agricultural tenant dwellings are of less substantial construction and appear to be situated near the roadsides of each farmstead, while the landowner's more imposing dwelling is located back from the road. How this is related to the agricultural community and the general social structure has not yet been explained.

...[F]arm-specific and inter-farm preferences for marketable versus subsistence foodstuffs are poorly known. From primary documents like agricultural censuses, orphans court records, and deeds, some indication of regional

agricultural preferences could be obtained and the overall pattern of agricultural land use could be better understood...

Related to both agriculture and settlement pattern is the question of farmstead design. How were the agricultural complexes laid out, what was the arrangement and function of outbuildings, where were the yard areas and how was each used...? The relative importance of transportation, soils,

markets, and other factors should be studied further on a more site-specific basis to see how they influenced farmstead design and placement through time...(Custer and Bachman 1986: 207-208).

A related study focusing on the Kent County section of the Route 13 By-pass corridor, Custer, Bachman, and Grettler, **An Archaeological Planning Survey of Selected Portions of the Proposed Route 13 Corridor, Kent County, Delaware** (1986) reiterated the research design outlined in Custer and Bachman, elaborating slightly in select areas relating to this historic context:

Apart from a need to study changes in Delaware's agricultural and economic history, specific questions concerning farm life need to be addressed (Wesler 1982: 18; Henretta 1978: 3). Did farmers grow most of the food their families consumed? How much income was earned and how was it spent? What proportion went to food, rent, clothing, tools, taxes, and household goods? Questions such as these point to a larger paradigm in American history--to what degree were farmers self-sufficient and how did this change over time? Much has been written about the traditional self-sufficiency of American farmers (Loehr 1952; Henretta 1978: 13-16, 20; Merrill 1977; Bidwell and Falconer 1941) and the study of the wide range of farm sizes represented in the Route 13 Corridor would yield valuable data.

A detailed study of...land records would also yield data on the stability through time of different settlement patterns. By studying the boundaries of different parcels and how they change through time due to sale, inheritance, or subdivision, it would be possible to test specific hypotheses about the history of Delaware and the region. In this way, land use and inheritance patterns can be seen as an "artifact" (Carter 1983: xiv; Heite and Heite 1981: 1) of the historic occupation of Delaware...

[A documentary] survey, supported by archaeological and material culture data from controlled surface collections, test excavations, and architectural investigations, could also be used to address other questions. For example, how permanent in general were farm and lot boundaries in the study area? How does the study area compare to other areas in Delaware and the Middle Atlantic? Again such specific questions can be used to address larger paradigms in American history. One such area of interest is the use of known trends in land ownership and inheritance patterns to mark larger changes in regional economic and social conditions (Mitchell 1978: 70; Earle 1975: 104-105, 131, 165)...(Custer, Bachman, and Grettler 1986: 196-197).

The following year, in 1987, Custer, Bachman, and Grettler published the Phase I/II Archaeological Research Plan, U. S. Route 13 Relief Route, Kent and New Castle Counties, Delaware. In introducing the research plan, the authors stated:

The following research questions and topics are designed to integrate the interdisciplinary use of all archival, historic, architectural, and archaeological resources within a general research design that can be coordinated with all the different phases of an eventual data recovery program. These questions are not theoretical or explanatory in themselves, but rather encompass numerous issues of anthropological and historical significance and are broad enough in scope to be applicable to many kinds of sites. In addition, as all of these research questions have been either directly or indirectly addressed by previous historical and archaeological research, these research directions are designed to complement, rather than replace, these existing data bases (Custer, Bachman, and Grettler 1987: 50).

The authors go on to elaborate considerably on the earlier proposed research designs, organizing the research plan under three major topics: 1) settlement pattern and locational studies; 2) social, economic, and transportation studies, and 3) material culture studies. The following presents those portions of the research plan applicable to this historic context, and which extend the proposed research designs outlined above.

#### **Settlement Pattern and Locational Studies**

By studying the way in which people settled in Delaware it is possible to address a number of important issues in the history of Delaware and the region. Settlement pattern and locational studies are based upon how people perceived an area and how they consciously or unconsciously located their dwellings in response to the natural and man-made environments...

...What principles governed site location in Delaware during the historic period? Are historic sites in the state patterned similarly to those in other areas of the Middle Atlantic? What is the relationship between the physical environment and settlement patterns in Delaware and the region? Similarly, how does site location vary through time in response to changes in markets, transportation, and agricultural developments and between different areas within Delaware, specifically New Castle versus Kent counties?...

## **Economic and Transportation Studies**

...A number of specific questions concerning this overall trend towards marketable crops in the agricultural history of the region (sic). What kinds of agricultural goods were sold in Delaware through time? What kinds of technological demands did different crops impose and how did farmers meet them? How "flexible" were farmers historically and how was Delaware affected by fluctuations in local, regional, and international markets?...

The geographic and archaeological data generated by all subsequent data recovery survey programs for the Route 13 Corridor would greatly increase our present understanding of the agricultural history of Delaware... Particularly exciting is the possibility of substantial data from farms of different size and socio-economic levels and from a variety of agricultural and commercial settings...

## **Material Culture Studies**

The last major group of research questions that can be applied to the Route 13 Corridor concern specific methodological questions within historical archaeology and material culture studies. Methodological research questions seek to refine the way in which we gather, analyze, and interpret archaeological and historical data. Very often, research aimed at methodological concerns involve gathering data relevant to specific topical research questions, particularly those within social history and economic studies. Thus, these material culture methodological questions have bearing on almost every aspect of historic (sic) archaeology...

One current methodological question within historical archaeology involves the use of material remains to determine social and economic status. Determinations of status and wealth through material remains is based on the seemingly common sense premise that wealthy or higher status households should contain different, ie. more expensive, artifacts than poorer ones...Recent studies, however, have found this model to be too simplistic...

In addition to artifact assemblages, archaeologists and material culturalists have looked to other social and economic factors, particularly subsistence patterns and foodways, to determine status, wealth, and especially ethnicity from the material record (Schuyler 1980). Foodways, or how food is prepared, served, and stored has proven to be a particularly significant factor in the interpretation of historic sites and further work appears promising. Food preparation, butchering practices, and seasonality seem to be particularly sensitive



factors in the material culture record (Bowen n.d.). In addition, foodways and subsistence have been extensively studied from a variety of disciplines (Anderson 1971; Champ 1979)...

With regard to research on food ways (sic) and subsistence (sic) patterns, artifact assemblages from different sites of known socio-economic levels and similar functions could be compared to determine the extent to which archaeologically derived data can be used to make reliable inferences about social and economic conditions...

A second major methodological concern within historical archaeology and material culture studies is the integration of archaeological and material culture data with more traditional historic resources such as inventories, orphan's court and probate records. How best can archaeological and material culture data and archival resources be used together? What can such data explain about the past? If the material record and archival sources disagree, how best can discrepancies be resolved? How best can oral histories be used within the archaeological record (Duranceau 1983)? Are physical remains inherently more objective and less biased than written records? How do artifacts and archaeological data depict change and what kind of data tells us the most about past human behavior? (Custer, Bachman, and Grettler 1987: 65-79).

(For a similar set of research questions, particularly focusing on foodways and the use of space, see Custer, Catts, and Coleman 1986: 155-156).

## B. 1830-1880

### 1. Previous Archaeological Research Questions

The fifty years spanning the middle of the 19th-century brought change to all facets of Delaware life. Thus it is proposed that archaeological research on this period focus on these processes of change:

- a. The impact of the transportation revolution (Hoffecker 1977; Lindstrom 1978, 1979; Potter 1960; Taylor 1964b; Walzer 1972);
- b. The transformation of the agricultural economy as it recovered from the crisis of the early 19th-century (Grettler 1990; Hancock 1947, 1976a; Lindstrom 1978);
- c. The social and economic changes resulting from the Civil War and emancipation as they affected agriculture and farm life;

- d. Change associated with the growth and diversification of industry; the consumer revolution spawned by America's industrialization (Lindstrom 1978, 1979; Taylor 1964b; Walzer 1972).

#### Domestic Economy

A program for the archaeological study of domestic economic systems was broadly outlined above. To operationalize such a research program, three interrelated topics are proposed as foci for archaeological research in Delaware over the next five years--architecture and land use, foodways, and self-sufficiency and market participation. Research questions include: how do households utilize architecture and the land to achieve their goals? How do socioeconomic status and aspirations, technology, household economy, ethnicity, and ideology and values all influence the construction of domestic buildings and the use and improvement of the land? To pursue these questions, archaeological research designs must assure data are collected not only on buildings and artifacts. Rather, all possible evidence of land use, activity areas, and landscape alteration must be sought. Episodes of cutting and filling, the construction, use, reconstruction, and abandonment of landscape features such as fences, paths, and drains, land use and activity areas identifiable through chemical signatures in the soils, and the natural and cultural vegetation--trees, gardens, and other plant communities--all must be documented.

Foodways, the interrelated systems of food procurement, preparation, and consumption (Anderson 1971), is a topic of long-standing interest in historical archaeology and one for which much comparative data have been amassed. Viewed as the domestic economy writ small, foodways derive from complex interrelationships among technology, natural environment, social and economic variables, trading networks, household occupational structures, cultural traditions, and even religion and beliefs. Clearly, in order to reconstruct and interpret foodways, information is needed on all of these variables. From archaeological sites, all cultural materials associated with food production and procurement, processing and storage, preparation, and consumption must be collected and analyzed. Food remains themselves--faunal and ethnobotanical--must also be collected through wet and dry screening and flotation.

The archaeological investigation of self-sufficiency and market participation seeks to place the household in a local, regional, and international economic context. Here the commercialization of agriculture and the expansion of trade are approached from the point of view of the individual producer and consumer. Archaeologically recovered items can be identified as produced on-site for household consumption, produced for barter or

trade, or produced elsewhere and acquired for consumption on-site. Foodways provide one avenue of approach to these broader questions. Whether looking at foodways or other components of the domestic economy, reconstructing trading networks remains central to the investigation. At the same time, on-site production and self-sufficiency are clearly reflected in land use.

The range, variability, and content of agricultural families' production and consumption strategies as they dealt with both the changing basis of the farming economy and with increasing industrialization remain incompletely understood. Industrialization, for example, provided both competition for home manufactures as well as greater availability of inexpensive household goods. Historical archaeological research has much to contribute to these questions regarding the domestic economic strategies of individual households, as recent studies in the state are beginning to show (Beidleman, Catts, and Custer 1986; Catts and Custer 1990; Catts, Hodny, and Custer 1989; Hoseth et al. 1990; LeeDecker et al. 1987).

A two-part archaeological research design is proposed. The first involves developing a set of detailed historical and archaeological case studies of individual agricultural households. Historical research assists in placing each household in its local and regional social and economic contexts, and in developing as complete a profile as possible of the household and its activities. Despite the general richness and extent of the nineteenth century's documentary record in comparison with earlier periods, detailed household-level reconstruction often remains impossible--thus the importance of the archaeological study of the household.

The second research component is comparative. Understanding comes not in the reconstruction of isolated cases, but in establishing the relationships between them and the differences and similarities among them. Grouping of households along social, economic, occupational, and other cultural criteria for purposes of comparison remains an open-ended process determined by the questions being asked. Comparative categories include:

- a. Geographic: Piedmont vs. Upper Peninsula; along transportation routes vs. those farther out in the hinterlands;
- b. Socioeconomic: Large land-owning agriculturalists vs. tenants vs. small subsistence agriculturalists vs. small commercial, diversified agriculturalists, etc.;
- c. Ethnic: African Americans vs. European Americans; native born vs. foreign born; English vs. Irish, etc.

Finally, comparisons must be made across time. Within this 50-year period, several starting points for comparison can be suggested:

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| 1830-1860 | Agricultural reorganization, initial expansion and reorganization of transportation systems, industrial growth.  |
| 1860-1866 | Civil War era and associated dislocations.   |
| 1866-1880 | Impact of emancipation and economic changes wrought by the Civil War; increasing industrialization and continued expansion and reorientation of the transportation system. |

#### Manufacturing and Trade

The archaeological study of agriculture is proposed as a research focus for the next five years, as it has been for the past several years (cf. Catts and Custer 1990; Hoseth et al. 1990; Shaffer et al. 1988). Perhaps more than with any other "industry," agricultural production and domestic economy intersect. Thus the questions outlined here relating to agriculture as production are meant to complement and extend inquiries into agriculture and domestic life. As a result, the above discussion of architecture and landscape and of self-sufficiency apply to the investigation of agricultural production as well as household economic strategies. In analyzing and interpreting agricultural buildings and landscapes, emphasis should be placed on building function, on the identification of discrete activity areas, and on the layout, organization, and spatial interrelationships among these elements of the agricultural complex. Archaeological, landscape, and documentary research must therefore address the entire farm and not merely the immediate vicinity of the farmhouse and associated outbuildings (cf. Adams 1990; Epperson 1990; Journey and Moir 1987; Stine 1990). Farm products and production processes can be studied through analysis of tools and equipment and faunal and archaeobotanical remains. Farms across the state must be investigated so that ultimately comparisons between geographic regions can be made. The relationships between the developing agricultural economy and the constraints and advantages of the natural environment, the larger economy, and the social and political systems will thus be further elucidated.

In addition to the domestic economy and culture of Delaware's farmers, the mid-nineteenth century changes in agricultural practices, processes, and products promoted by scientific reformers warrant archaeological investigation. Prescriptions for change and to a certain extent actual changes in practice can be reconstructed from the documentary record. Published journals of the scientific reformers and the records of the agricultural societies established in Delaware during this period have proved especially useful

(Allmond 1958). Once again, however, detailed reconstructions of this process of change and the variability among farmers of different geographic areas, economic positions, etc., remains to be accomplished. Archaeological studies of changing farm practices require considering the entire landscape of the farm, agricultural outbuildings, and farm tools and equipment.

A change in the basic marketable products of the farm accompanied this reform movement in transforming Delaware's agricultural economy. This transformation followed the extension of the railroad network from north to south (Bidwell and Falconer 1941; Hancock 1976a; Lindstrom 1978; Michel 1985). Similar archaeological data are required to investigate this aspect of agricultural change: patterns of land use and building, and information on agricultural tools and farming equipment.

### Landscape

In addition to the research emphasis in Domestic Economy and Manufacturing and Trade on land use and the landscape at the individual site, attention must also focus on property types as components of larger settlement systems. Consideration must be given to natural environmental variables such as topography, soil type, and proximity to a water source, and to cultural variables--social, economic, technological, and ideological--such as the availability of land, and distances to nearest neighbor, to kin, to church, to industrial power sources, to markets, and to transportation. Analysis may proceed at different levels. For example, the siting and distribution patterns of individual property types may be studied. Similarly, larger settlements comprising an assemblage of individual property types may be the focus of research. Ultimately, all these pieces together defined a statewide settlement system, one that can be studied as it evolved over time. Settlement system dynamics are not yet understood, both the ways the system responded to and the ways it contributed to changes in transportation, regional or national economics, technology, social structure and organization, population size, and local and regional ecology (cf. Langhorne 1976; Leone 1973; Lewis 1984; Lukezic 1990; Paynter 1982; Singleton 1985; Starbuck 1986; Wall 1987).

The research programs for the other domains in this time period emphasize the landscape of individual sites--land use, land alteration, and the meanings of the landscape and its various components. In this domain, evolving settlement patterns form the focus. Numerous, complex, and interrelated phenomena contribute to these changing patterns: the shifts in the agricultural economy and agricultural practices; the transformation of the transportation system via the canal and then the railroads; the increasing scale of industrial operations; the establishment of new industries; and the impact of technological innovations. In general, this research can be accomplished through analysis of

historical maps during preliminary surveys. However for geographic areas and time periods for which incomplete map evidence exists, archaeological field data are also required.

#### Social Group Identity, Behavior, and Interaction

The middle decades of the nineteenth century witnessed not only increasing stratification and thus distance between social classes, but also increasing interaction among groups as the agricultural, industrial, transportation, and mercantile communities redefined an integrated Delaware economy. Research can proceed from a framework organized around the concept of community. What did "community" come to mean in the nineteenth century, and how did the concept change over time as a result of the social, economic, and material transformations that characterized the period? Architecture, landscape, and other material items all mediated social interaction at these sites and thus form the material culture data base. (The preceding has been abstracted from De Cunzio and Catts 1992).

Delaware historical archaeologists have also outlined research questions and plans to guide data recovery investigations at individual sites. Those relevant to this historic context, for the 1830-1880 period, are summarized below.

#### H. Grant Tenancy, Mill Creek Hundred, New Castle County

In response to changing economic conditions in the beginning of the 19th century, land tenure became consolidated into the hands of fewer individuals near urban areas (Bidwell and Falconer 1941: 242). Landowners often had business interests connected with industrialization or commerce in urban centers and frequently lived in the city. To maintain agricultural production, a system of tenancy was employed. Tenants were probably drawn from groups of lower economic status in both urban and rural population, but very little historic research has been devoted to these individuals and little is known of their economic or cultural background. Likewise few remnants of their material culture, including their housing, have survived....[T]he H. Grant Tenancy site represented the remains of such tenancy and...an examination of the material culture could provide valuable information about such sites. Because the site was felt to contain structural remains, it was felt that it might be possible to learn more about the spatial arrangement and relationships of the dwelling and other service buildings such as storage sheds, animal pens, privies, etc. to show how these compare to the large complexes of the owners, many of which are still extant. It was also felt that an examination of the discarded material possessions from the site would allow a more precise characterization of the social and economic status of the occupants (Taylor et al. 1987: 6-7).

Allen House, outskirts of Christiana, New Castle Hundred,  
New Castle County

A number of recent archaeological reports have considered rural farmsteads in northern Delaware during the eighteenth and nineteenth centuries (Coleman et al. 1983; Coleman et al. 1984; Custer et al. 1985). Three basic questions formed the basis of each of the studies:

- 1) Are changes in artifact distributions present and do they indicate changing spatial utilization? Can such changes in patterns be related to historically documented economic and social changes in the surrounding area?
- 2) Are there changes in the presence or absence, and frequencies, of certain artifact classes through time that can be related to changes or stability in purchase and consumption habits of the site's occupants?
- 3) Do changes in either of the above categories of data reflect meaningful covariance?

Each of these questions is also applicable to the Allen Site. The examination of such variables was expected to provide a common base for intersite comparison. To these questions were added:

- 4) Can distinctions be made between the nature of the artifact assemblage of the Allen Site (i.e., place of manufacture, quality of goods, relative proportion, cost of items, etc.) and those of more rural or more urban sites in northern Delaware? Do these distinctions covary through time? Can they be explained through site placement or socioeconomic status?
- 5) Can changes in spatial utilization be observed within and around the Allen House? How do these compare with nearby houses and sites? What temporal factors can be discerned? (Basalik, Brown, and Tabachnick 1987: 48).

William M. Hawthorn Farm, Christiana, New Castle  
County

...[T]he site provided an excellent opportunity to gain a better understanding of the changing lifeways of a northern Delaware farm through time. The site was also thought to provide a unique setting to study the effects of historically documented urban and regional trends concerning agricultural land-use and socio-economic patterns on farmsteads in rural, yet not isolated, areas. Three general study topics were

developed to guide the...project. To accomplish these research goals, specific hypotheses and test implications were developed from the following study topics:

- A) Patterns of artifact distribution and spatial utilization
- B) Purchase and/or consumption habits
- C) Covariation of change between topics A and B

**HYPOTHESIS I:** Changes in the site structure are present due to changing spatial utilization and/or function at the site.

...This study of site content can be focused on different distributions through time of varied classes of artifacts such as ceramic and glass refuse, agricultural-related refuse, and subsistence refuse.... Similarly, artificial changes in site landscape may have been accomplished through the activities as the farmstead changed (Handsman 1981)...

**HYPOTHESIS II:** Changes in the presence or absence, and frequencies of certain artifact groups or artifact classes should be related to changes and/or stability in the purchase and consumption habits of the site's occupants through time.

It is probable that regional and local socio-economic changes had affected the income of the site's inhabitants and concomitant (sic) their purchase and consumption habits. An assumption was maintained that these changes were the result of a change from a colonial, subsistence-oriented agricultural economy to that of a broader-based market economy which took hold some time in the nineteenth century... Presently unknown are the specific effects on local farm economies of events that occurred as part of the Industrial Revolution such as the development of improved transportation networks, increased population densities, and settlement pattern shifts.

...The testing of Hypothesis II assessed the effects of industrialization, expanding markets, and improved transportation networks on rural farm economies and economic status, as exemplified by the William M. Hawthorn farmstead... (Coleman et al. 1984: 10-14).



Robert Ferguson/Weber Homestead, Ogletown, New Castle County

The research design was created to provide information on the archaeological and architectural characteristics of a tenant farm and the lifeways of the house occupants from the period 1837-1940. The object was to generate a comparative (sic) data base for use in future archaeological excavation and analysis...

The research was concentrated on the three topics: the number and configuration of outbuildings, the associated artifact types, and the artifact distribution and concentration. From this data (sic) it was hoped that information could be obtained regarding the life of a tenant farmer, and specifically, on the ethnicity and economic status of the occupants. The following hypotheses formed the basis for the research design.

Hypothesis 1

If this is a tenant farm, then the number of outbuildings should not be those necessary for the daily operation of a 145 acre farm, but should be more representative of those structures required for day to day use by a single family.

Test Implications:

The archaeologically recovered outbuildings and standing structures associated with a tenant dwelling should include privy houses, small garages, sheds, and chicken houses. Structures not expected to be found would include large barns associated with hay storage or dairy operations, corn cribs, wagon and machinery storage sheds, livestock pens, and other utility buildings.

Hypothesis 2

If the Ferguson House is a tenant farm dwelling through the period 1837-1940, then the artifact types recovered should reflect a lower economic standing than those recovered from the main farmhouse.

Test Implications:

The artifact types recovered should include mass-produced items like redware, undecorated whitewares, and ironstone, and should not include porcelains, hand-blown glass tablewares, or imported wares...

### Hypothesis 3

The intra-site artifact spatial patterning will show specialized types of usage areas typical of a tenants (sic) domestic dwelling for the years 1837-1940.

### Test Implications:

"Space usage and structure can vary for a number of reasons including the cultural origin of the occupants, economic status, site function, social changes or alterations in concepts of sanitation" (H. Miller 1980). Areas of land use will be discerned through the spatial distribution of the recovered artifacts. Activity areas will be delimited which are specific to tenant farm occupants through time (Coleman et al. 1983: 23-25).

### A. Temple Farm Tenancy, Ogletown, New Castle County

#### **HISTORICAL RESEARCH PERSPECTIVES**

...The A. Temple Site can provide researchers with an opportunity to examine in detail a tenant farm run by absentee landowners with other tenant farms and non-tenant occupations located within the region. Such comparisons can provide insights into spatial, social-economic, and cultural aspects of tenant life in northern and central Delaware in the nineteenth century. Since the site is located in an area of relatively little growth, the A. Temple Site provides an opportunity to study the local, regional, and national economic and social developments.

#### **ARCHAEOLOGICAL RESEARCH PERSPECTIVES**

Research at eighteenth and nineteenth century historic sites in northern Delaware has indicated that some of the most significant information to be derived from historical archaeological investigations is related to patterns of spatial utilization and their changes through time. One aspect of spatial utilization can include the analyses and comparison of faunal remains and other ecofacts indicative of diet, food processing and consumption habits, and use of space at the site (Custer and Cunningham 1986)...

Another set of comparisons will investigate questions about rural cultural processes and cultural change such as:

1) Are changes present in refuse disposal processes and techniques? Can changes be observed in the patterns of artifact distribution, and are these changes indicative of varied spatial utilization at the site? Furthermore, can such

changes in patterns be related to historically-documented economic and social changes in the surrounding area or to changes in a larger area?

2) Are there changes in the presence/absence or frequency of certain artifact classes among the various historic sites? Can these changes be related to the socio-economic position of the site's inhabitants or to local and regional economic conditions?

3) Can changes in either of the above categories of data be analyzed for meaningful covariance? (Hoseth et al. 1990: 56-58).

#### Williams Site, Glasgow, New Castle County

The tenancy period of site occupation (pre-1846) can be used to address questions concerned with explicating and illuminating the lifeways of the tenant class of rural Delaware, and, by implication, of the Middle Atlantic region. It is known that farm tenants comprised a significant portion of the rural population of nineteenth century Delaware (Bausman 1933). The traditional view of farm tenants as poor and of lower social position has been recently called to (sic) question... (Catts and Custer 1990: 35).

#### John Darrach Store and Tenancy, Duck Creek Hundred, Kent County

##### Tenancy

The Delaware Plan cites the reconstruction of the household domestic economy as a principal research goal for the historical archaeological investigation of domestic sites, whether tenant or owner occupied. Moreover, the Delaware Route 1 Project research design includes among its research domains investigation of the expression of social and economic circumstances in material culture (Custer, Bachman, and Grettler 1986: 199; Custer, Bachman, and Grettler 1987: 77). Specific research questions include (De Cunzo and Catts 1990: 133-134):

What were the household's goals and what were the strategies employed to achieve them?...

To what extent was the household self-sufficient and to what extent did it participate in a local, regional, national and international market? What was produced on-site for household consumption? What was produced on-site for barter or sale? What was produced elsewhere (and where) and acquired for consumption on-site? (De Cunzo and Catts 1990: 133-134).

These questions build also on the Delaware Route 1 Project research goals of elucidating agricultural life, agricultural tenancy, the agricultural economy, and their evolution in Delaware from the seventeenth through the mid-twentieth century (Custer and Bachman 1986: 207-208; Custer, Bachman, and Grettler 1986: 195-198; Custer, Bachman, and Grettler 1987: 71).

#### Agricultural Crisis and Reform: 1790-1840

What was the impact on agricultural tenants? What strategies did these households devise to survive agricultural failure and depression? How did farming techniques, equipment, practices, products, land use and architecture change as a result of the crisis and then in response to the reform efforts?

#### Evolution of Architecture and Landscape

The goal is to reconstruct the architecture and landscape of the Darrach Store Site and examine their evolution over time, and then to interpret these features in the context of several factors:

- Environmental: The physical features and constraints of the Duck Creek Hundred environment and their relationship to the agricultural potential of the area, the early nineteenth century agricultural crisis, and the water transportation system...
- Functional: The site's dual function as a merchant's store and as an agricultural tenancy
- Economic: ...the crisis, reform, and renewed growth of the nineteenth century associated with the site's occupation by an agricultural tenant
- Social: ...the agricultural tenants to whom they rented the property (De Cunzo et al. 1992).

#### Nathan Williams Site and the Archaeology of Agriculture, Scarborough Road, Dover, Kent County

A Phase I archaeological survey of this road alignment located the site of Nathan Williams' tenant farm (7K-C-389), dating from before 1840 through the end of the nineteenth century (Heite and Blume 1992: 55). "The Williams House Site...is an exceptionally rare well-documented house site related to a pre-Civil War free black who was not a landowner" (Heite and Blume 1992: 62).

Research on the site could contribute significant information on this generally poorly documented Delaware social group as well as on the "social transformations that occurred" as a result of the Civil War (Heite and Blume 1992: 131).

More broadly, Heite and Blume advocate expanding the scope of the "archaeology of agriculture" as practiced in Delaware, with special focus on the scientific agriculture of the post 1830 period (Heite and Blume 1992: 23). They classify agricultural fields as an archaeological property type that can "provid[e] evidence of agricultural practices, particularly reclamation methods and the use of soil additives." Their research "concentrate[d] on identifying observable traces of agricultural practices...includ[ing] planting holes and plow scars, artifact distributions, chemical traces, and physical traces of soil improvers such as marl and calcined shell." In addition, they distinguish ditches as another agriculturally-significant archaeological property type. "Ditches have been used throughout the historic period to drain wet areas in order to make them arable" (Heite and Blume 1992: 14).

In a chapter on "Agricultural Archaeology", the authors further develop these archaeological research topics. For example, they claim that "[s]uch events as mechanization, chemical fertilization, substitution of row crops for orchards, or introduction of the use of marl, should be reflected in the soil record. Poor husbandry and attempts to recover from its effects, should be dramatically visible in the soil in the form of deep erosion deposits at field edges" (Heite and Blume 1992: 81). Furthering our understanding of these events requires paying increased attention to such archaeological manifestations as plow scars, root molds, planting holes, ditches, and chemical and material evidence of fertilization (Heite and Blume 1992: 83-84, 95-97).

#### W. Eager Farm, near Dover, Kent County

Data recovery excavations were not undertaken at the W. Eager Farm, but the researchers identified questions that the data from the Phase I/II investigations can illuminate.

The W. Eager site was occupied during the periods...1830-1880+/-...and 1880-1940+/-... The period between 1830 and 1880 saw the development of a prosperous regional agricultural economy centered on the urban markets of Wilmington, Philadelphia, Baltimore, and New York...

The W. Eager site can also be placed in a local context of similar rural, agricultural sites in the State Route 1 Corridor (Grettler et al. 1991)...

The two primary research domains applicable to the W. Eager site concern the domestic economy of the site and changes in the local and regional social and economic landscape. Two related themes, changes in agriculture and settlement patterns, predominate. The 1830-1880 and 1880-1940 periods in Delaware history saw three critical changes that could be studied through further archival and archaeological research: 1) transportation developments; 2) economic and agricultural change with the development of commercial fruit, truck produce, legume, and dairy industries that took advantage of changes in transportation and the expanding regional urban markets; and 3) changing agricultural labor and tenancy patterns...

[One] research interest is in the role of ethnicity and socioeconomic status in the domestic economy and settlement patterns of historic sites in central Delaware and the Mid-Atlantic region. Specifically, the W. Eager site represents a lower socioeconomic status white occupation. Data from the W. Eager site could be used to reconstruct the social and economic landscapes of an important social group... [C]omparisons may help to identify wealth-related archaeological patterns in domestic economy, consumer behavior, and trash disposal patterns while controlling for ethnic variables (Grettlar 1991: 140-146).

For a similar statement of research questions relevant to the study of the Buchanan-Savin Farm Site, G. W. Cummins Outbuilding Component, Moore-Taylor Farm Site, H. Wilson-Lewis Tenant Farm Site, C. Kimmey Tenant Farm Site, and the Izat-Dyer House Site, see Grettlar et al. 1991: 294-295.

## 2. Proposed Archaeological Research Questions

The research program laid out in the Management Plan for Delaware's Historical Archaeological Resources (De Cunzo and Catts 1990) and reviewed above, along with the supplementary and complementary research questions posed by other archaeologists working on New Castle and Kent county agricultural sites dating between 1830 and 1880, will form the archaeological research program proposed for this historic context. This leaves two important issues to be addressed in this section. The first is simply stated, yet central to the implementation of the entire research program: the archaeological units of study for this historic context are, first, New Castle's and Kent's farms dating to the 1830-1880 period and, second, other properties that housed agricultural workers. This warrants emphasis, despite the fact that it is clearly stated in the Management Plan's research program, because the archaeological sites themselves, as defined above under VI. ARCHAEOLOGICAL PROPERTY TYPES, do not usually constitute the entire historic property, especially in the case of farms. Research on all archaeological sites representing all of

the proposed property types must place the site in the context of the farm or other historic property of which it formed a part. The research questions must relate to the entire farm or historic property, although they will of course be formulated to maximize the information recoverable from the site itself. Nevertheless, it is expected that documentary, oral, and archaeological research will not be limited by the boundaries of the archaeological site, but by the boundaries of the historic property. Even then, as the research program stresses, sites must also be placed in larger contexts of community, geographic and economic zone, etc. Returning to the farm or other historic property, this means that although the agricultural fields, isolated field dumps, field scatters, plow scars, planting holes, orchards, woodlots, watercourses, drainage ditches, field boundaries--hedgerows, tree rows, fences, walls--and other related features will in most cases not be included within the boundaries of archaeological sites associated with this historic context, they are nevertheless archaeological resources with significant information to offer. It is therefore expected that their investigation will form a part of archaeological research designs whenever appropriate.

The second issue relates to those parts of the research program that call for investigation and then comparison of representative numbers of different "types" of farms and agricultural workers' properties. In this usage in the context of the research program, "types" of properties is broad ranging. For example, "types" of farms include dairy farms and subsistence (or self-sufficient) farms, as well as Piedmont and Upper Peninsula farms, as well as owner-operated and tenanted farms, as well as the residences of European Americans and of African Americans engaged in agriculture, as well as the properties of agricultural households of different religions, occupational structures, points in the life cycle, income levels, and socioeconomic statuses, as well as properties occupied for only a decade and those occupied for two centuries. Prior to preparing this historic context, little more could be done than to identify the framework of "types" outlined above. Now more specific information has been assembled and presented in the **HISTORIC CONTEXT NARRATIVE**. It is summarized here in an attempt to define the principal farm "types" of New Castle and Kent counties between the years of 1830 and 1880 (see **V. HISTORIC CONTEXT NARRATIVE** for more detailed information).

Based on a study of the 1850 Censuses of Agriculture and Population and a sample of probate records, Jack Michel defined three geographical areas in New Castle and Kent counties, each dominated by a particular "type" of farming. Comparatively small but capital intensive farms emphasizing dairying and beef cattle typified the northern tier of New Castle County hundreds, those lying in the Piedmont. Many northern farmers utilized modern agricultural implements and equipment as well as the latest "scientific" agricultural practices to farm their land intensively and maximize returns. They also relied more heavily on family

labor alone than farmers in other areas. The wheat belt of large commercial grain and dairy farms spanned central and southern New Castle County. These farmers too invested heavily in modern agricultural equipment, yet still needed to supplement its efficiency with large numbers of enslaved and hired laborers, principally the latter. Kent County at this date, in contrast, was characterized by large, mixed general market and subsistence farms still largely unaffected by the agricultural reforms of the time.

Other research has demonstrated that some subsistence and small-scale market farms existed across both counties and throughout the time period. In addition, between 1840 and about 1855 peach farms came to virtually predominate around Delaware City, and spread slightly later along the Appoquinimink, especially in the vicinity of Middletown. Beginning about 1850, market or truck farming, the raising of vegetables for urban markets, also gained importance in northern New Castle County, along with raising apples. In Kent County, peach farms as a "type" date to about 1860, and remained important through the end of the period. The passing of the railroad through the county increased farmers' access to and thus participation in the northern urban markets, and thus the county's farms became ever more commercialized as the decades passed. Finally, while dairying remained important, transportation and technological innovations changed its nature by 1880, when fluid milk for market began to dominate production on the counties' dairy farms, especially those in New Castle County.

The social hierarchy of New Castle and Kent county agriculture also had material correlates allowing its investigation by archaeologists. At the pinnacle of the hierarchy stood the elite gentleman farmer, the owner of the counties' estates (such as the DuPonts in the Piedmont) and of the large wheat farms and peach orchards to the south. This upper one-tenth of the population controlled between two-thirds and three-quarters of the taxable wealth. On the next rung stood the rest of the farm owner-operators; distinctions they recognized among themselves for the most part elude us at present. Most landowners, however, ranked among the wealthiest 20% of the population in the tax assessments, as the value of their properties accounted for the greater part of their wealth. Aspiring to farm ownership were those families who rented farms for shares or cash, and in many cases also those families provided tenant houses on the farms of owner-operators along with wages, in return for assistance with the farm work. These tenants comprised an average of one-half of the farm operators in the two counties throughout the period, although the figures varied over time and between hundreds. Below them stood the laborers who did not live on farms but who engaged at least part time in farm work or who boarded in the homes of farm operators. Finally, before 1862, some Delaware farms also prospered through the labor of slaves, and thereafter through the efforts of migrant workers.



Ethnicity, gender, household structure, and religion form other important aspects of the sociocultural context of farming in Delaware. Though women and girls contributed in significant ways to the domestic agricultural economies of their families and households, they rarely owned or rented farms or worked off their home farms for wages on a full-time basis. Throughout this period, European immigrants comprised a small component of the counties' agricultural population. More of the small number of Irish, English, Scottish, Welsh, and German immigrants to Delaware between 1830 and 1880 worked as agricultural laborers than owned their own farms. Free African Americans, although they comprised up to one-third of the population of individual hundreds, constituted an extremely small percentage of farm owners and operators. Even more than immigrants, they concentrated in the ranks of the agricultural laborers. In 1860 in Little Creek Hundred, for example, they tenanted only 8% of the hundred's farms, mostly those with the lowest values. As the population of New Castle and Kent counties grew steadily between 1840 and 1870, many new households were formed, and household size declined. Young families were numerous during these years, especially in the Upper Peninsula zone. Laborers boarding with the owner or tenant-operator's family contributed to the farm's labor force in both counties, although again their numbers varied between hundreds and over time, and more research is needed to fully describe and explain the variability. Least understood at present are the religious affiliations of the counties' farmers, and the influence their beliefs had on their domestic and agricultural economies and practices. The only religious group that has received attention in the context of farming and farm life is the Society of Friends, in Jensen's study of Quaker and other farm women in the period ending in 1850.

### C. 1880-1940

#### 1. Previous Archaeological Research Questions

Numerous reasons have been offered for the lack of significance attributed to archaeological resources of this period: the increase in the extent and representativeness of the documentary record; the availability of oral historical information; the sheer number of sites; and the survival, often not substantially altered, of architectural and landscape features dating from this period. Delaware has not been exempt from this bias against recent period sites.

Several recent studies (cf. Adams 1976, 1977; Askins 1985; Beaudry and Mrozowski 1987a; Branstner and Martin 1987; Carlson 1990; Cheek and Friedlander 1990; Davidson 1982; Henry 1987a, 1987b; Stine 1990), including a few in Delaware (Beidleman, Catts, and Custer 1986; Catts and Custer 1990; Catts, Hodny, and Custer 1989) have demonstrated the research potential and information value of these sites, and indicate that the richness of the information available from other sources enhances these sites'

archaeological potential. Considering the material evidence--architecture, landscape, and archaeological artifacts--as offering supplementary, complementary, and often alternative insights into daily life, cultural values and beliefs, social group identification and interaction, and production processes and distribution networks provides the key. Determining the significance of a late period site proceeds, as in the earlier periods, from an evaluation of the site's potential to address the research questions and issues identified in the **Management Plan**. In addition, archaeologists and cultural resource managers must carefully consider the data potentially contributed by the archaeological record in relation to that available from other sources, the site's integrity, and its representativeness or uniqueness. Decisions must be made on a site by site basis. Sweeping generalizations that whole classes of sites dating to this period lack significance cannot be made; neither can archaeologists and cultural resource managers assume that every site exhibiting integrity is significant, especially when large numbers of similar sites survive intact. For example, projects that will negatively impact large numbers of these later period sites warrant a sampling strategy, one justifiable in the context of the above discussion.

The cultural continuities and changes characterizing this period are both represented in the subjects proposed as archaeological research priorities:

- a. The continuation of trends in agriculture and industry identified in the 1830-1880 period (Bausman 1939, 1940, 1941a, 1941b; Hancock 1976a; Hoffecker 1977; Munroe 1984; Shannon 1945);
- b. The increasing ethnic diversity of the population--the immigration of Amish and Mennonite farmers into central and southern Delaware, the northern migration of African Americans and the changing relations among African Americans and the European American population (Hoffecker 1977);
- c. Another revolution in transportation, this one associated with the development of the automobile and the extension and improvement of the road and highway system (Rae 1975).

The broad themes of the research programs presented above for the study of Domestic Economy, Manufacturing and Trade, Landscape, and Social Group Identity, Behavior, and Interaction apply to the archaeological study of the late nineteenth and early twentieth centuries as well. A research program incorporating in-depth case studies of select sites, settlement pattern analysis, and multivariate comparative studies, remains the key. (The preceding has been abstracted from De Cunzio and Catts 1992).

Delaware historical archaeologists have also outlined research questions and plans to guide data recovery investigations at individual sites. Those relevant to this historic context, for the 1880-1940 period, are summarized below.

William M. Hawthorn Farm, Christiana, New Castle County

See 1830-1880 above.

Robert Ferguson/Weber Homestead, Ogletown, New Castle County

See 1830-1880 above.

A. Temple Farm Tenancy, Ogletown, New Castle County

See 1830-1880 above.

Williams Site, Glasgow, New Castle County

The final period of site occupation is the black laborer period, and it is in this period that the Williams Site can add immeasurably to the data base of historic information... The history of postbellum rural blacks in Delaware, and indeed for the entire Middle Atlantic region, is an important topic of study, yet has received little attention in the historical literature. [B]lacks in Delaware comprised a significant portion of the rural population (Bausman 1933; Homsey 1979)... Historical and archaeological investigations of the Williams Site should be directed at helping to illuminate and delineate... [the history of Delaware's African Americans]...through an examination of the site's occupants and the local black community in (sic) which they were a part (Catts and Custer 1990: 36-38).

See also Catts, Hodny, and Custer 1989: 49-50 for a similar statement of research questions relating to the Daniel H. Egbert Tenancy, Eagle Run near Christiana, New Castle County.

Jacob B. Cazier Tenancy Site, Pencader Hundred, New Castle County

The site was occupied for approximately 50 years, perhaps by one tenant family. It is significant for two reasons. First, it can yield data for comparison with other nineteenth century excavated tenant sites in the region... Perhaps more significantly, however, it provides an unusual opportunity to study spatial patterns and material culture processes of a black household in Delaware in the nineteenth century... (Lothrop, Custer, and De Santis 1987: 232-233).

### W. Eager Farm, near Dover, Kent County

See 1830-1880 above. For a similar statement of research questions relevant to the study of the Buchanan-Savin Farm Site, G. W. Cummins Outbuilding Component, Moore-Taylor Farm Site, H. Wilson-Lewis Tenant Farm Site, C. Kimmey Tenant Farm Site, and the Izat-Dyer House Site, see Grettler et al. 1991: 294-295.

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agricultural workers' properties. In this usage in the context of the research program, "types" of properties is broad ranging. For example, "types" of farms include dairy farms and subsistence (or self-sufficient) farms, as well as Piedmont and Upper Peninsula farms, as well as owner-operated and tenanted farms, as well as the residences of European Americans and of African Americans engaged in agriculture, as well as the properties of agricultural households of different religions, occupational structures, points in the life cycle, income levels, and socioeconomic statuses, as well as properties occupied for only a decade and those occupied for two centuries. Prior to preparing this historic context, little more could be done than to identify the framework of "types" outlined above. Now more specific information has been assembled and presented in the **HISTORIC CONTEXT NARRATIVE**. It is summarized here in an attempt to define the principal farm "types" of New Castle and Kent counties between the years of 1880 and 1940 (see **V. HISTORIC CONTEXT NARRATIVE** for more detailed information).

The single best enumeration of farm "types" during this period is that presented in the 1930 census (Table 17). In that year, most farms in both counties were classified as General, their owners/operators presumably practicing a mixed subsistence and market agriculture perhaps exemplified by the Benton family in Murderkill Hundred. General farms were about equally under the tenure of owners and tenants. New Castle County also contained almost 400 Dairy farms, more than 200 Part-time farms, 160 Cash-grain (Wheat) farms, almost 140 Self-sufficing (Subsistence) Farms and smaller numbers of Poultry, Truck, Specialty Crop, and Fruit farms. In Kent, Poultry farms numbered almost 325, still well below the number of General farms (over 1,200). In addition, Kent contained almost 225 Fruit farms, almost 200 Self-sufficing (Subsistence) and Dairy farms, 175 Cash-grain (Wheat) farms, over 155 Part-time and Truck farms, and a smaller number of Specialty Crop farms. In both counties, about 80% of the Poultry and Self-sufficing farms were operated by their owners, compared to two-thirds of the Fruit farms, less than 60% of the Dairy farms, and between one-half and two-thirds of the Truck farms. Tenancy still predominated on the large wheat farms; three-quarters of those in New Castle were under the tenure of tenants, along with more than two-thirds of those in Kent.

Other research allows us to supplement this classification and extend it back toward the 1880s. Throughout the period, Middletown sat at the center of the wheat region, which extended to encompass St. Georges, southern Pencader, northern Appoquinimink, and portions of Red Lion and New Castle hundreds. Beginning as early as 1880, however, farmers were decreasing their acreage devoted to corn and wheat. In Kent County, the 175 wheat farms reported in 1930 as well as those operated as early as 1880 were concentrated in the northern half of the county. In this more southerly county, wheat and corn production did not begin to decline until after 1900. Dairying remained focused in the

northern Piedmont hundreds and around Middletown, although northern Kent farmers also remained actively involved in dairying and, through the 1880s, in raising beef cattle for market. Fruit harvests declined in New Castle beginning in 1890; however in the decade following the census's farm typology, apple harvests more than doubled. Throughout the period, Kent County's orchards and berry farms clustered around Dover in the Camden-Wyoming area of North and South Murderkill hundreds. The 1930s also witnessed a dramatic increase in truck farming, especially in eastern Mispillion and western Milford hundreds in southern Kent County. Poultry farming increased in importance during this period in both counties, but especially in Kent between 1880 and 1935. Finally, cropping on the farms of both counties was revolutionized with the introduction of soybeans, in the 1920s in Kent County and the following decade in New Castle.

The social hierarchy of New Castle and Kent county agriculture also had material correlates allowing its investigation by archaeologists. At the pinnacle of the hierarchy stood the elite gentleman farmer, the owner of the counties' estates (such as the DuPonts in the Piedmont) and of the large wheat farms and peach orchards to the south. This upper one-tenth of the population controlled between two-thirds and three-quarters of the taxable wealth. On the next rung stood the rest of the farm owner-operators; distinctions they recognized among themselves for the most part elude us at present. Aspiring to farm ownership were those families who rented farms for shares or cash, and in many cases also those families provided tenant houses on the farms of owner-operators along with wages, in return for assistance with the farm work. These tenants comprised an average of one-half of the farm operators in the two counties throughout the period, although the figures varied over time and between hundreds. In both counties, renting for a share of the farm's products remained the arrangement of choice throughout the period, although in New Castle County cash renters were numerous as well. Below these tenants stood the laborers who did not live on farms but who engaged at least part time in farm work or who boarded in the homes of farm operators. Finally, some Delaware farms also prospered through the efforts of migrant workers.

Ethnicity, gender, household structure, and religion form other important aspects of the sociocultural context of farming in Delaware. Though women and girls contributed in significant ways to the domestic agricultural economies of their families and households, they rarely owned or rented farms or worked off their home farms for wages on a full-time basis. Throughout this period, European immigrants comprised a small component of the counties' agricultural population. More of the small number of Irish, Scottish, and Welsh immigrants to Delaware between 1880 and 1940 worked as agricultural laborers than owned their own farms. In addition, native born Delawareans by 1930 virtually dominated the best agricultural lands in both counties. Free African Americans,

although they comprised a significant portion of the population of individual hundreds, constituted a steadily decreasing percentage of farm owners and operators. When they did own or rent farms, they were almost always the most marginal, those assessed at the lowest values in land, buildings, and equipment. Even more than immigrants, African Americans continued to concentrate in the ranks of the agricultural laborers. Laborers boarding with the owner or tenant-operator's family contributed to the farm's labor force in both counties, although again their numbers varied between hundreds and over time, and more research is needed to fully describe and explain the variability. In 1930, for example, two-thirds of the counties' unmarried farm workers were men, many probably boarding in farmers' households. Least understood at present are the religious affiliations of the counties' farmers, and the influence their beliefs had on their domestic and agricultural economies and practices. The Amish of Kent County in particular offer an opportunity to explore these interrelationships.

E. Association with a Person or Event Significant in Local, Regional or National History or Culture

The final step in the evaluation process concerns those sites determined eligible for the National Register during Section 106 review projects or in other negative impact situations. It involves determining those eligible sites which must proceed to data recovery. Here the issue is to demonstrate whether in fact the project impact is adverse and, if it is, whether a substantial portion of the significant site area is actually within the area of adverse impact. Those significant sites which cannot be protected from substantial negative impact will proceed to data recovery (De Cunzo and Catts 1990: 191-196).

Fourteen Phase II archaeological projects in New Castle and Kent counties have also evaluated the significance/ determined the National Register eligibility of archaeological sites of farms, tenant farms, and farm laborer houses occupied in the 1830-1940 period. The 11 New Castle County projects evaluated 26 sites, the three Kent County projects 11 sites. In addition, several project reports stated that identified archaeological sites associated with this historic context were not eligible for the National Register, but gave no reasons. These have not been considered here. A series of preliminary planning studies for the Route 13 By-pass/ Delaware Route 1 corridor also identified general criteria for evaluating the significance/ National Register eligibility of historical archaeological sites in study areas associated with that project (Custer et al. 1984; Custer and Bachman 1986; Custer, Bachman, and Grettler 1986; Custer, Bachman, and Grettler 1987). The following section outlines these criteria, beginning with the New Castle and Kent County project areas outside the Route 13/ Delaware Route 1 corridor. The criteria proposed and since applied in studies of the Route 13/ Delaware Route 1 corridor projects are then discussed. Only projects with reports completed at the date of this writing have been included.

Route 7 North Corridor, Milltown to the Pennsylvania State Line, Mill Creek Hundred, New Castle County

Surveys of this corridor identified three archaeological sites associated with this historic context: the William Torbert Tenant House Site, the J. Chambers House Site, and the Beeson Yeatman House Site. Archaeologists determined the mid-nineteenth century Torbert Tenant House Site ineligible for the National Register due to "[t]he absence of any features or other definitive archaeological evidence," in other words, a lack of integrity. Excavations at the Chambers House Site "revealed an extensively disturbed site with no stratigraphic context and recently filled features... The site is not eligible for the National Register of Historic Places due to lack of integrity." In contrast, "[b]ecause...[the Beeson Yeatman House Site] has yielded a variety



of artifact types from undisturbed contexts, the site is considered eligible for listing in the National Register of Historic Places under Criterion D. Furthermore, the archaeological data from the Yeatman House Site can be used to study research questions concerning nineteenth century tenant life in northern Delaware. Excavations at the Beeson Yeatman House Site can be informative of the processes of social change and land tenancy in northern Delaware" (Catts, Shaffer, and Custer 1986: 160, 162, 164, 174-175).

Route 141 north of Prices Corner to Kennett Pike, Mill Creek Hundred, New Castle County

Survey of this project corridor located four archaeological sites associated with this historic context.

These...[included]: the Armstrong site identified on the 1893 Baist Atlas as containing three brick or stone structures; the Hollingsworth site which was indicated on the same map as containing a frame structure; and the Cleremont site on which a residence and outbuildings dating to at least 1846 had been present, but were subsequently destroyed. An inspection of the locations of these potential sites revealed that the Armstrong and the Cleremont sites were outside the right-of-way, that no structures were currently standing in these locations, and that it was unlikely (based on a cursory surface inspection) that intact cultural remains would be...[preserved] (Barse 1985: 107).

The fourth site was the H. Grant Tenancy (see Taylor et al. 1987).

This site is considered to be eligible for nomination in the National Register of Historic Places. Intact features were observed in a sub-plow zone context, suggesting the preservation of good archeological context of materials associated with the site. The site provides a good opportunity to study the economic unit of the tenancy, as none have been excavated to date in Delaware and few in the Middle Atlantic region, at least for this time period... The tenancies represent a relatively little described class in the historical documentation of the era, yet formed an important economic substrate of American society (Barse 1985: 109-110).

Beaver Valley Road, Brandywine Hundred, New Castle County

A survey of the Beaver Valley Road project area identified one site relating to this historic context: the Sauber House Site (7NC-B-20). Due to the site's shallowness and heavy disturbance, ie. its lack of integrity, the Sauber House Site was determined ineligible for the National Register (Grettler, Watson, and Custer 1988: 218-220).

Route 41 (Newport-Gap Pike), Christiana Hundred, New Castle County

Archaeologists identified three residential sites in this project corridor, possibly farms or the homes of farm workers. All were built soon after 1872 when the Wilmington and Western Railroad passed through the neighborhood. These sites, the Hollingsworth, Conner, and Bower sites, were not determined eligible for listing in the National Register.

Because of the late date of the archaeological deposits [at the Hollingsworth Site], the site is not eligible for the National Register and no further work is recommended. Also, the absence of artifact disposal patterning and the kinds of data used to address questions on socio-economic status preclude eligibility for the National Register. Furthermore, small rural homesteads of the New Castle County Piedmont which possess lower levels of disturbance and greater numbers of diagnostic features and artifacts in good context have been reported elsewhere (Bachman and Custer 1988: 79).

Similarly, for the Conner Site, "no specific patterns of yard use could be determined from the Phase II excavations. Because of the late date of the archaeological deposits and the absence of any demonstrable activity areas, the site is not considered to be eligible for the National Register and no further work is recommended" (Bachman and Custer 1988: 111). Finally, "[b]ecause of the late date of the archaeological deposits at the Bower house and the absence of significant artifact distributions, the site is not considered to be eligible for the National Register of Historic Places and no further work is recommended" (Bachman and Custer 1988: 128).

Route 7 South Corridor, Route 13 to Route 95, Christiana and New Castle Hundreds, New Castle County

Phase II excavations at the two sites in this project area associated with this historic context (the Daniel H. Egbert Tenancy and the William Egbert Heisler Tenancy) constituted data recovery. The sites' eligibility for the National Register rested on the their integrity and on the information they could provide on nineteenth-century agricultural tenancy, and especially the experience of northern Delaware's African Americans (Catts, Hodny, and Custer 1989).

New Churchman's Road, White Clay Creek Hundred, New Castle County

An archaeological survey of the New Churchman's Road corridor located the W. M. Hawthorn Farmstead (see also Coleman et al. 1984).

The significance of the Hawthorn Farmstead lies in the fact that no similar farmsteads in the region have been excavated and reported on for comparative purposes related to artifact patterning or distribution. Because archival investigations on the site have provided no information of utility in studying the Farmstead, archaeological investigations must be relied upon... The site has been shown to be archaeologically undisturbed... Specifically, because of the separate, undisturbed areas of cultural materials dating to differing periods of occupation of the site, it probably retains information concerning the variation in spacial (sic) utilization of a farmstead in the surrounds of the residence structure from the late-18th century through the mid-20th century. Hence this site provides the research opportunity to gain a better understanding of the changing lifeways of the Delaware farmer through time as well as a comparative base for future excavations at other similar sites (O'Connor et al. 1983: 109).

Whitten or Walther Road, County Road 346, White Clay Creek Hundred, New Castle County

The Whitten Road Site, a farm along the Christina River occupied from the first half of the eighteenth century until the early nineteenth century by its owners, the Stewart family, and from then until the mid-nineteenth century by tenant farmers, was discovered during an archaeological survey of the new Whitten Road alignment. The site was determined eligible for listing in the National Register because it exhibited good integrity and it represented an "18th century site type which has never been encountered during previous research in the northern Delmarva area" (Shaffer et al. 1988: 289). The occupation of the farm in the nineteenth century by tenant farmers was not considered a component of the site's significance.

Old Baltimore Pike Corridor, Four Seasons Parkway to Christiana By-Pass, White Clay Creek Hundred, New Castle County

Surveys of this corridor identified four archaeological sites potentially associated with this historic context: the Dayett House Site, the Lee Site, the W. Brooks House Site, and the Lloyd Site. The Dayett House was occupied by a succession of owners and tenants from the 1860s through 1964.

The results of the Phase I and II testing at the...[s]ite indicate that, though there is some archaeological evidence of the structure that stood at this corner remaining within the ROW this evidence has been considerably disturbed by the 1964 DelDOT demolition and is in poor condition. The features identified during the testing were for the most part

indistinct and difficult to define... Due to the poor context of the remainder of the site, the specific purposes of these features are not known... The site is not considered eligible for listing on the National Register, and no further work is recommended at 7NC-D-141 (Catts, Hodny, and Custer 1989: 118-119).

The Lee Site (7NC-D-143) contained two small mid-nineteenth century tenancies, perhaps "house and garden" tenant farmer houses, occupied through the early twentieth century. "[D]emolition and subsequent reworking of the property has badly damaged the cultural integrity of the site. The site is not eligible for the National Register..." (Catts, Hodny, and Custer 1989: 155). The Brooks House Site perhaps constituted one of the earliest homestead locations in the project area; a residential structure stood on the property until 1985 (Catts, Hodny, and Custer 1989: 161). "The W. Brooks House Site is not considered eligible for inclusion to the National Register due to lack of cultural integrity, and no further archaeological investigations are recommended for the site" (Catts, Hodny, and Custer 1989: 167). "Like the W. Brooks House Site, the Lloyd Site (7NC-D-136) was the location of an eighteenth through twentieth century house site" (Catts, Hodny, and Custer 1989: 167-168) leased to tenants to farm through much of the nineteenth century. From 1868 into the twentieth century, its owners worked the farm (Catts, Hodny, and Custer 1989: 167, 173). Because most of the site lay outside the project area, its National Register eligibility was not determined (Catts, Hodny, and Custer 1989: 183).

Routes 4, 273, and 7, Christiana, White Clay Creek, and New Castle Hundreds, New Castle County

This survey located three archaeological sites associated with this historic context (Thomas 1980). The Robert Ferguson House was determined eligible for the National Register on the basis of the significance of both its architecture and archaeological record. The site exhibited enough integrity that it "should be possible to recover significant socio-cultural information about the small landowner in the early nineteenth century, a period and class for which we currently have little comparative data" (Coleman et al. 1983: 105). The A. Temple Tenant Farm was similarly considered

significant because it is likely to contribute data important to the understanding of the history of both the local area and the surrounding Mid-Atlantic region (Criterion D). The combination of the presence of relatively undisturbed, intact archaeological deposits, extant foundations from both an extensive agricultural outbuilding complex and the domestic house site, assisted by a complete historic photographic documentation of the site offer the possibility that valuable comparable data on mid-to-late 19th century tenant farmer lifeways can be obtained from the site. Archaeological

excavations have the potential to provide significant research information on a little known class of sites in Delaware and the Middle Atlantic... Important information can also be obtained on agricultural practices, most importantly farm layout that will be comparable to data obtained from research in the surrounding region (Coleman, Hoseth, and Custer 1987: 269).

The third site, an "historical archaeological site of possible mid-nineteenth century derivation" had been severely disturbed, and did not exhibit adequate integrity for listing on the National Register (Thomas 1980: VI-4).

Route 273, from Route 7 to Route 13, New Castle, Christiana, and White Clay Creek Hundreds, New Castle County

Archaeological survey of the Route 273 corridor identified two potential historical archaeological sites associated with this historic context. The Taylor Farm Site (7NC-E-87), "a family-owned and market-oriented agricultural enterprise...active from 1866 to 1936," exhibited "little, if any, vertical or horizontal integrity" (Brown, Basalik, and Tabachnick 1990: 179-180). Thus the site was ineligible for the National Register. The Clayton Farm Site (7NC-E-89), a late nineteenth to mid-twentieth century tenant farm, was intensively investigated through both the documentary and archaeological records during the Phase II survey. Thus at the completion of these investigations, the "site no longer possesse[d] the potential to add to our understanding of rural life in northern Delaware" (Brown, Basalik, and Tabachnick 1990: 182-183).

Route 896, Pencader Hundred, New Castle County

Archaeological survey of this road corridor located two historical archaeological sites associated with this historic context. The Thomas Williams Site (7NC-D-130) was deemed significant under Criterion D of the National Register. Specifically,

it is significant because it can yield archaeological data on the domestic life of an independent, lower-class property owner who was not directly involved in the agricultural industry which dominated rural nineteenth century economics in Delaware... It may also have been the residence of a black couple in the early 1900's and thus can provide an unusual opportunity to study the spatial patterns and material culture processes of a black household in Delaware in the early twentieth century... The value of investigating these types of sites stems from the belief that ethnic or racial differences may be apparent in a site's material remains (Catts and Custer 1990: 332-334).

Farm tenants occupied the second site, the Jacob B. Cazier Tenancy Site (7NC-F-64). African American retainers of the famous northern Delaware agricultural reformer, Jacob B. Cazier, lived in the house for approximately 50 years. Phase II testing indicated the site exhibited good integrity, and that it offered promise to provide comparative data on nineteenth-century tenancy. "Perhaps more significantly, however, it provides an unusual opportunity to study spatial patterns and material culture processes of a black household in Delaware in the nineteenth century" (Lothrop, Custer, and De Santis 1987: 232).

Route 13 Relief Corridor/ Delaware Route 1 Corridor, New Castle and Kent Counties

The Cultural Resources Reconnaissance Planning Study of the this corridor outlined a series of criteria to apply in evaluating the historical archaeological sites found to lie in the corridor. "The criteria are not ranked and they are not meant to be all-inclusive" (Custer et al. 1984: 125):

1. Age: Sites providing information on early settlement, technology, commerce, industry, or lifeways are more significant.
2. Regional Interest: Sites which have impact on regional or local research problems are more significant.
3. National Interest: Sites which have impact on national or universal research problems are more significant.
4. Preservation: Sites containing well-preserved structural, faunal, floral, or skeletal remains are more significant.
5. Multi-function: Sites exhibiting a range of well-defined activity/functional loci are more significant.
6. Uniqueness: Sites containing rare or unique features (technological innovations, slave-related components) are more significant.
7. Previous Knowledge: Site types about which little is known are more significant and those which provide information on poorly understood social-historical contexts are more significant.
8. Public Significance: Sites which may easily be used in public education programs due to site contents and accessibility for public viewing are more significant.
9. Size and Density: Larger sites and those containing dense deposits of material culture are more significant.

10. Famous Events or Persons: Sites associated with a person or event of local, regional, or national interest are more significant.
11. Duration of Occupation: Sites exhibiting discrete temporal loci whether in the context of long-term or short-term occupations are more significant (Custer et al. 1984: 127).

The Reconnaissance Planning Study then applied these criteria to 1,195 potential historical archaeological sites associated with this historic context (the time period reached back to 1802, and forward to 1950). Information on these sites was drawn from the State Historic Preservation Office's standing building inventory file, archaeological site inventory file, and from historic maps. The information available on many of these potential sites was admittedly scanty, and the preliminary evaluations were intended only as a guide for future planning and research (Custer et al. 1984: 18, 22-25, 36-45).

In the Phase I/II Archaeological Research Plan, the authors clearly stated that the significance of archaeological resources within the Route 13/ Delaware Route 1 Corridor would derive from their ability "to produce data relevant to current historical, geographical, archaeological, and architectural research questions and goals" (Custer, Bachman, and Grettler 1987: 51). They organized the research plan for historical archaeological resources into three sections: Settlement Pattern and Locational Studies, Social, Economic, and Transportation Studies, and Material Culture Studies (see also VII. ARCHAEOLOGICAL RESEARCH QUESTIONS). Based on available information, they then suggested the potential of different site types of different time periods (identified in the Reconnaissance Planning Survey) to yield significant data relating to these three research areas.

Agricultural Complexes and Agricultural Tenancies dating between 1820 and 1950 were considered to have high potential to yield significant information on Settlement Patterns, Farmstead and Houselot Design, Agricultural History, Commercial and Industrial History, Subsistence and Foodways, Tenancy, Community Studies, Status and Wealth, Ethnicity, and Material Culture Studies (Custer, Bachman, and Grettler 1987: 55, 60-61, 64).

This research plan and the proposed criteria were first tested in studies of specific project areas within the larger corridor in both New Castle and Kent counties. Historic site locations were field checked and tested in three project areas in New Castle County: St. Georges, Appoquinimink, and Blackbird (Custer and Bachman 1986: 5). Ten project areas in Kent County were tested: Smyrna, Leipsic, Dyke and Muddy Branches, Hughes Crossing, Chestnut Grove, Little River/ Pipe Elm Branch, Wyoming Lake, Derby Pond, and

Double Run/ Spring Creek (Custer, Bachman, and Grettler 1986: 5). Evaluations of significance were ultimately based on four of the original criteria:

1. Preservation...
2. Multi-Function (Number and type of outbuildings)...
3. Size and Density (Number and type of archaeological features)...
4. Duration of Occupation...(Custer and Bachman 1986: 194; Custer, Bachman, and Grettler 1986: 180).

Subsequently, archaeologists have undertaken Phase II research and data recovery at several sites in the Route 13/ Delaware Route 1 corridor. Two historical archaeological sites located along Route 6 between Smyrna and Smyrna Landing are associated with this context: the John Bailey House Site (7K-A-102) and the John Darrach Store and Tenancy (7K-A-101). Archaeologists found the Bailey House site to have been heavily disturbed, and thus ineligible for the National Register due to a lack of integrity. The Darrach Site exhibited good integrity--intact subsurface features and quantities of material culture. As a result, and because it demonstrated potential to address significant research questions, archaeologists determined the Darrach Site eligible for the National Register. Its original research potential was considered to lie in the areas of the "growth and development of Kent County's mercantile and commercial landscape in the eighteenth and nineteenth century;... the supply side of the economic equation;... and the material...[culture] of [the] upper class (De Cunzo et al. 1992).

A Phase II survey of the 17 mile right-of-way between Dover and Smyrna tested and evaluated another six sites associated with this context.

Archival research... identified the Buchanan-Savin Farm Site [7NC-J-175] as a owner- and tenant-occupied farm occupied from the second quarter of the nineteenth century to the present. Phase II testing identified two major activity areas at the site... Historic artifacts were recovered from intact strata in both areas and the potential for further subsurface features is high.... The presence of intact subsurface features, undisturbed artifact bearing strata, and intact standing structures led to the determination that the site is eligible for inclusion on the National Register of Historic Places under Criterion D... (Grettler et al. 1991: 57-58).

...[E]ight historic features were identified at the G. W. Cummins Outbuildings Site [7K-A-104]... The site was determined to not contribute to the known eighteenth century



component of the associated G. W. Cummins House... and no further work is recommended (Grettler et al. 1991: 119).

Phase II archival research and archaeological testing has identified the Moore-Taylor Farm Site [7K-C-380] as a small farm complex occupied from the mid-nineteenth to the mid-twentieth century... [H]istoric artifacts were recovered from undisturbed strata and intact historic features [containing historic artifacts] were identified... [The site was thus determined eligible for the National Register] (Grettler et al. 1991: 152).

[The H. Wilson Lewis Tenant Farm Site (7K-C-375) was] an early to late nineteenth century tenant and owner occupied farm complex... No structurally-related features were identified and no other features except for the remains of two fence posts... Despite the degree of plow disturbance..., the lack of more historic features and the low numbers of historic artifacts found, the site is considered to be potentially eligible on (sic) the National Register... The site was occupied by very poor tenants... Sites of this low socio-economic status are generally poorly preserved and... [this] site represents a significant opportunity to more closely study the lifeways of an important, but poorly documented group in Delaware history (Grettler et al. 1991: 176, 187).

[The C. Kimmey Tenant Farm Site (7K-D-119) represents] the remains of a predominantly tenant-occupied farm occupied from the second quarter of the nineteenth century until the 1970s... Archaeological testing recovered historic artifacts from intact strata and identified a high potential for additional artifact-bearing deposits... [Several intact features also remained.]... The nineteenth century component of the Kimmey Site is eligible for listing on the National Register... under Criterion "D" (Grettler et al. 1991: 237, 270-271).

Archival research has identified the [Izat-Dyer House Site (7K-D-3)] as the remains of a mid-nineteenth century owner- and tenant-occupied frame house... Phase I and II archaeological testing did not locate any subsurface features and all artifacts recovered came from disturbed plowzone contexts. Phase II testing thus determined that the site was not potentially eligible for inclusion on the National Register (Grettler et al. 1991: 272-273).

Finally, Phase I and II Archaeological Surveys of Road 88 (Dover to Leipsic Road) and Road 337 (Persimmon Tree Lane) Realignments in East Dover Hundred, Kent County, along the Delaware Route 1 Relief Corridor, identified three archaeological sites associated with this historic context. Investigations at the Bason

Field Site (7K-C-385) produced limited quantities of historic artifacts, historic maps showed no structures in the vicinity, and no evidence of site function could be identified. Thus archaeologists determined the site ineligible for the National Register. The Spiro-Diamond Site (7K-C-384) proved to be a recent twentieth century dump and was thus also determined ineligible for the National Register (Grettler et al. 1991: 150).

The work at the third site, the W. Eager Farm Site (7K-C-383), "yielded data significant to current research questions in history and archaeology... As a small mid-to-late nineteenth century agricultural tenancy and owner-occupied farm,...[it helps] trace the critical social and economic changes that occurred in central Delaware in the nineteenth and early twentieth centuries" (Grettler et al. 1991: 140). The project archaeologists thus determined the site eligible for the National Register; Phase II testing constituted data recovery (Grettler et al. 1991: 148).

#### **B. New Criteria for Evaluation**

The components of research designs for collecting data to evaluate the integrity and significance of archaeological sites associated with this historic context remain essentially as outlined in the Management Plan for Delaware's Historical Archaeological Resources (De Cunzo and Catts 1990: 191-196):

1. Historical and Oral Historical Research
  - a. To collect data to attribute site to one (or more over time) of the seven property types associated with this historic context
  - b. To collect data for defining research questions and goals
  - c. To collect data regarding site representativeness
  - d. To survey the available documentation regarding its nature and extent
2. Architectural (Standing Buildings - if present)
  - a. To consider the data potential
3. Existing Cultural Landscape
  - a. To consider the data potential, presence, and nature of historic components associated with the farm or other property under consideration
4. Archaeological Field Testing
  - a. To determine boundaries
  - b. To identify property type
  - c. To determine temporal integrity
  - d. To determine physical integrity in the following categories:
    - (1) Architecture
    - (2) Land use and landscape
    - (3) Other features and deposits

- (4) Artifact assemblages
- (5) Faunal and ethnobotanical remains
- (6) Soil chemical signatures

New criteria for evaluating the Integrity and the Significance of each of the seven archaeological property types associated with this historic context are presented in the following section.

## 1. Agricultural Complex

### a. Criteria for Integrity

#### (1) Physical Integrity

Agricultural Complexes must exhibit integrity in the archaeological expressions of their defining components: dwelling(s), domestic outbuildings, agricultural outbuildings, and utilitarian and nonutilitarian landscapes such as formally landscaped and maintained lawns, yards, and gardens; kitchen gardens; work yards; animal pens; wells and other water sources; drives, lanes and paths; and trash and other waste disposal areas and features. Strata, features, soil chemicals, material culture assemblages, and faunal and ethnobotanical remains comprise the archaeological embodiments of these components, of the Complex residents' possessions, and of the activities the residents undertook within the Complex. These must remain intact and substantially undisturbed by activities that post-date the period of significance of the site as an Agricultural Complex. Intact and undisturbed strata, features, soil chemical signatures, and material culture, faunal, and ethnobotanical assemblages retain their original contextual, functional, and temporal relationships to each other.

For each site, criteria for integrity must be evaluated in conjunction with the criteria for significance. In all cases, a site must exhibit sufficient integrity to allow researchers to address research questions relating to at least one of the four research domains: Domestic Economy; Landscape; Manufacturing and Trade; and Social Group Identity, Behavior, and Interaction. All sites must also exhibit integrity such that they will yield information that cannot be obtained from other sources. Given the large number of Agricultural Complexes in New Castle and Kent counties, sites with partially compromised integrity will be significant only if 1) they represent a "type" of farm (see VII. ARCHAEOLOGICAL RESEARCH QUESTIONS) that occurred only in comparatively small numbers in the area of and at the time of the site's occupation; 2) they represent a "type" of farm poorly documented in the documentary and oral records; 3) the Complexes also exhibit good architectural integrity such that the architectural and archaeological resources supplement and complement each other in the information they contain; or 4) the farms of which the Complexes were a part during the period of

significance also contain extant landscape features, such as agricultural fields, or other property types, such as Agricultural Outbuildings, with good integrity that date to the period of the Complexes' significance.

## (2) Temporal Integrity

Agricultural Complexes exhibit temporal integrity if they either a) represent short-term occupations and exhibit physical integrity relating to the period of occupation, or b) represent long-term occupations and exhibit physical integrity relating to either (1) the occupation of an identifiable period within the overall occupation of the Complex or (2) the entire period of occupation, such that change within the context of a single property can be explored.

### b. Criteria for Significance

#### (1) Historical Documentation and Oral History

To be determined significant in most cases, Agricultural Complexes of the 1830-1940 period must be extensively documented in a diverse array of documentary and, for sites of the 1880-1940 period, oral sources (see discussion below for the cases in which this requirement may be waived). First, documentary and/or oral information must confirm the site's function as an Agricultural Complex. Sources such as those listed under Associative Characteristics in the section on **PROPERTY TYPES** and others can provide this confirmation. Second, these sources must also 1) document the physical components of the site and the farm of which it was a part, 2) offer demographic, occupational, and other sociocultural information on the Complex's residents, their activities, and their goals and strategies, and/or 3) provide technological and economic data on the farm's and farmer's products, operation, tools, equipment, agricultural practices, investments, improvements, market and exchange networks, and the like. For a site to be determined significant, documentary information need not be available relating to all of these issues. There must, however, be sufficient documentary information to address at least one of the research domains: Domestic Economy; Landscape; Manufacturing and Trade; and Social Group Identity, Behavior, and Interaction. Moreover, at least one description or graphic depiction of the Complex during its period of significance must be available, and some primary historical information must document at least one of the households that occupied the Complex during the period of the site's significance (the same period for which the archaeological resources exhibit integrity).

These requirements of extensive and diverse historical documentation of an Agricultural Complex may be waived if 1) the Complex represents a "type" of farm (see VII. **ARCHAEOLOGICAL RESEARCH QUESTIONS**) that occurred only in comparatively small

numbers in the area of and at the time of the site's occupation; 2) the Complex represents a "type" of farm typically poorly documented in the documentary record, such as those occupied by poorer and often by African American tenants; 3) the Complex also exhibits good architectural integrity such that the architectural, documentary, and archaeological resources supplement and complement each other in the information they contain; 4) the farm of which the Complex was a part during the period of significance also contains extant landscape features, such as agricultural fields, or other property types, such as Agricultural Outbuildings, with excellent integrity that date to the period of the Complex's significance; 5) the Complex represents a "type" of farm not yet investigated intensively by archaeologists; or 6) the Complex and the farm of which it was a part are especially well documented in the oral record.

Oral historical information on Agricultural Complexes dating to the 1880-1940 period must be sought. This information is especially important, as the research carried out to develop this historic context indicates that many Agricultural Complexes of this period may be poorly documented in contemporary written and graphic records. Complexes for which good oral history sources exist will meet this criterion of significance.

## (2) Representativeness

An Agricultural Complex will be evaluated based on its representativeness of the "types" of farms discussed above under VII. ARCHAEOLOGICAL RESEARCH QUESTIONS and V. HISTORIC CONTEXT NARRATIVE. Several criteria must be considered in determining representativeness: 1) farm type; 2) geographical zone; 3) temporal period; 4) tenure; 5) ethnicity; 6) resident's religion; 7) household composition and structure; 8) economic position of the Complex's residents; 9) changes in the farm's type over the period of the Complex's occupation; and 10) participation of the Complex's residents in the scientific agricultural reform movements of the period. The goal is to study archaeologically a representative sample of farms that are both typical and atypical when measured by these criteria. Representativeness is meant to be measured in terms of Agricultural Complexes studied archaeologically, in terms of the estimated total universe of Agricultural Complexes occupied between 1830-1880 and 1880-1940 in each geographical zone, and in terms of the estimated total number of Agricultural Complexes dating between 1830-1880 and 1880-1940 in each geographical zone that potentially exhibit archaeological integrity, ie. that have not been destroyed by the phenomena and practices threatening archaeological sites across the state.

### (3) Research Questions

An Agricultural Complex is significant if it can address research questions relating to at least one of the research domains: Domestic Economy; Landscape; Manufacturing and Trade; and Social Group Identity, Behavior, and Interaction. An Agricultural Complex's potential to address research questions must always be measured in the context of the farm of which it was historically a part.

### (4) Association with a Person or Event Significant in Local, Regional, or National History or Culture

Significance under this criterion is closely linked to integrity. In order for an Agricultural Complex to be significant because of its association with a person or event significant in local, regional, or national history or culture, it must contain intact and undisturbed archaeological resources directly associated with the significant person or event.

## **2. Agricultural Dwelling**

### a. Criteria for Integrity

#### (1) Physical Integrity

Agricultural Dwellings must exhibit integrity in the archaeological expressions of their defining components: dwelling(s), domestic outbuildings, and utilitarian and nonutilitarian landscapes such as formally landscaped and maintained lawns, yards, and gardens; kitchen gardens; work yards; animal pens; wells and other water sources; drives, lanes and paths; and trash and other waste disposal areas and features. Strata, features, soil chemicals, material culture assemblages, and faunal and ethnobotanical remains comprise the archaeological embodiments of these components, of the Dwelling's residents' possessions, and of the activities the residents undertook within the Dwelling. These must remain intact and substantially undisturbed by activities that post-date the period of significance of the site as an Agricultural Dwelling. Intact and undisturbed strata, features, soil chemical signatures, and material culture, faunal, and ethnobotanical assemblages retain their original contextual, functional, and temporal relationships to each other.

For each site, criteria for integrity must be evaluated in conjunction with the criteria for significance. In all cases, a site must exhibit sufficient integrity to allow researchers to address research questions relating to at least one of the four research domains: Domestic Economy; Landscape; Manufacturing and Trade; and Social Group Identity, Behavior, and Interaction. All sites must also exhibit integrity such that they will yield

information that cannot be obtained from other sources. Given the large number of Agricultural Dwellings in New Castle and Kent counties, sites with partially compromised integrity will be significant only if 1) they represent dwellings on a "type" of farm or agricultural worker's residential property (see VII. **ARCHAEOLOGICAL RESEARCH QUESTIONS**) that occurred only in comparatively small numbers in the area of and at the time of the site's occupation; 2) they represent dwellings on a "type" of farm or agricultural worker's residential property poorly documented in the documentary and oral records; 3) the Dwellings also exhibit good architectural integrity such that the architectural and archaeological resources supplement and complement each other in the information they contain; or 4) in the case of Dwellings located on farms, the farms of which the Dwellings were a part during the period of significance also contain extant landscape features, such as agricultural fields, or other property types, such as Agricultural Outbuildings, with good integrity that date to the period of the Dwellings' significance.

## (2) Temporal Integrity

Agricultural Dwellings exhibit temporal integrity if they either a) represent short-term occupations and exhibit physical integrity relating to the period of occupation, or b) represent long-term occupations and exhibit physical integrity relating to either (1) the occupation of an identifiable period within the overall occupation of the Dwelling or (2) the entire period of occupation, such that change within the context of a single property can be explored.

### b. Criteria for Significance

#### (1) Historical Documentation and Oral History

To be determined significant, Agricultural Dwellings of the 1830-1940 period must ideally be extensively documented in a diverse array of documentary and, for sites of the 1880-1940 period, oral sources (see discussion below for the cases in which the requirement may be waived). Documentary and/or oral information must confirm the site's function as an Agricultural Dwelling. Sources such as those listed under Associative Characteristics in the section on **PROPERTY TYPES** and others can provide this confirmation. Sites for which documentary sources also 1) document the physical components of the site and the farm or residential property of which it was a part, and 2) offer demographic, occupational, and other sociocultural information on the Dwelling's residents, their occupations, their activities, and their goals and strategies will meet this criterion for significance. For a site to be determined significant, there must be sufficient documentary information to address at least one of the research domains: Domestic Economy; Landscape; Manufacturing and Trade; and Social Group Identity, Behavior, and Interaction.

These requirements of extensive and diverse historical documentation of an Agricultural Dwelling may be waived if 1) the Dwelling stood on a "type" of farm or agricultural residential property (see VII. **ARCHAEOLOGICAL RESEARCH QUESTIONS**) that occurred only in comparatively small numbers in the area of and at the time of the site's occupation; 2) the Dwelling stood on a "type" of farm or agricultural residential property typically poorly documented in the documentary record, such as those occupied by poorer and often by African American tenants; 3) the Dwelling also exhibits good architectural integrity such that the architectural, documentary, and archaeological resources supplement and complement each other in the information they contain; 4) in the case of a Dwelling located on a farm, the farm also contains extant landscape features, such as agricultural fields, or other property types, such as Agricultural Outbuildings, with excellent integrity that date to the period of the Dwelling's significance; 5) the Dwelling stood on a "type" of farm or represents a "type" of agricultural residential property not yet investigated intensively by archaeologists; or 6) the Dwelling and the farm or agricultural residential property of which it was a part are especially well documented in the oral record.

Oral historical information on Agricultural Dwellings dating to the 1880-1940 period must be sought. This information is especially important as the research carried out to develop this historic context indicates that many Agricultural Dwellings of this period may be poorly documented in contemporary written and graphic records. Dwellings for which good oral history sources exist will meet this criterion of significance.

## (2) Representativeness

An Agricultural Dwelling will be evaluated based on its representativeness of the "types" of farms and agricultural residential properties on which it stood, as discussed above under VII. **ARCHAEOLOGICAL RESEARCH QUESTIONS** and V. **HISTORIC CONTEXT NARRATIVE**. Several criteria must be considered in determining representativeness: 1) farm or property type; 2) geographical zone; 3) temporal period; 4) tenure; 5) ethnicity; 6) resident's religion; 7) household composition and structure; 8) economic position of the Dwelling's residents; 9) changes in the farm's or property's type over the period of the Dwelling's occupation; and 10) in the case of Dwellings located on farms, participation of the Dwelling's residents in the scientific agricultural reform movements of the period. The goal is to study archaeologically a representative sample of farms and agricultural residential properties that are both typical and atypical when measured by these criteria. Representativeness is meant to be measured in terms of Agricultural Dwellings studied archaeologically, in terms of the estimated total universe of Agricultural Dwellings dating between 1830-1880 and 1880-1940 in each geographical zone, and in



terms of the estimated total number of Agricultural Dwellings dating between 1830-1880 and 1880-1940 in each geographical zone that potentially exhibit archaeological integrity, ie. that have not been destroyed by the phenomena and practices threatening archaeological sites across the state.

### (3) Research Questions

An Agricultural Dwelling is significant if it can address research questions relating to at least one of the research domains: Domestic Economy; Landscape; Manufacturing and Trade; and Social Group Identity, Behavior, and Interaction. An Agricultural Dwelling's potential to address research questions must always be measured in the context of the farm or property of which it was historically a part.

### (4) Association with a Person or Event Significant in Local, Regional, or National History or Culture

Significance under this criterion is closely linked to integrity. In order for an Agricultural Dwelling to be significant because of its association with a person or event significant in local, regional, or national history or culture, it must contain intact and undisturbed archaeological resources directly associated with the significant person or event.

## **3. Agricultural Outbuilding**

### a. Criteria for Integrity

#### (1) Physical Integrity

Agricultural Outbuildings must exhibit integrity in the archaeological expressions of their defining components: agricultural outbuildings and their associated utilitarian landscapes such as gardens; work and storage yards; animal pens; wells and other water sources; drives, lanes and paths; other features associated with the functioning of but external to the outbuilding(s), and trash and other waste disposal areas and features. Strata, features, soil chemicals, material culture assemblages, and depending on the nature of the outbuildings, faunal and ethnobotanical remains comprise the archaeological embodiments of these components and of the activities undertaken within and around the Outbuilding. These must remain intact and substantially undisturbed by activities that post-date the period of significance of the site as an Agricultural Outbuilding. Intact and undisturbed strata, features, soil chemical signatures, and material culture, faunal, and ethnobotanical assemblages retain their original contextual, functional, and temporal relationships to each other.

For each site, criteria for integrity must be evaluated in conjunction with the criteria for significance. In all cases, a site must exhibit sufficient integrity to allow researchers to address research questions relating to at least one of the four research domains: Domestic Economy; Landscape; Manufacturing and Trade; and Social Group Identity, Behavior, and Interaction. All sites must also exhibit integrity such that they will yield information that cannot be obtained from other sources. Sites with partially compromised integrity will be significant only if 1) they represent a "type" of Agricultural Outbuilding (see V. **HISTORIC CONTEXT NARRATIVE**) that occurred only in comparatively small numbers in the area of and at the time of the site's occupation; 2) they represent a "type" of Agricultural Outbuilding poorly documented in the documentary and oral records; 3) they represent a "type" of Agricultural Outbuilding for which little or no archaeological information has previously been collected; 4) the Outbuildings also exhibit good architectural integrity such that the architectural and archaeological resources supplement and complement each other in the information they contain; or 5) the farms of which the Outbuildings were a part during the period of significance also contain extant landscape features associated with the Outbuildings, such as agricultural fields or orchards, or they also contain other property types, such as Agricultural Complexes, with good integrity that date to the period of the Outbuildings' significance.

## (2) Temporal Integrity

Agricultural Outbuildings exhibit temporal integrity if they either a) represent short-term occupations and exhibit physical integrity relating to the period of occupation, or b) represent long-term occupations and exhibit physical integrity relating to either (1) the occupation of an identifiable period within the overall occupation of the Outbuilding or (2) the entire period of occupation, such that change within the context of a single property can be explored.

### b. Criteria for Significance

#### (1) Historical Documentation and Oral History

To be determined significant, it is not always necessary for Agricultural Outbuildings of the 1830-1940 period to be well-documented in primary historical and, for sites of the 1880-1940 period, oral sources. Researchers must always search for documentation. Sites for which sources such as those listed under Associative Characteristics in the section on **PROPERTY TYPES** and others 1) confirm the site's function as an Agricultural Outbuilding, 2) document the physical components and function of the Outbuilding and the farm of which it was a part, 3) offer demographic, occupational, and other sociocultural information on the farm's residents, and/or 4) provide technological and economic

data on the farm's and farmer's products, operation, tools, equipment, agricultural practices, investments, improvements, market and exchange networks, and the like, definitely meet this criterion for significance.

Agricultural Outbuildings for which historical and/or oral documentation, beyond that confirming the site's property type, does not survive may still be determined significant if 1) the Outbuilding represents a "type" of outbuilding (see VII. **ARCHAEOLOGICAL RESEARCH QUESTIONS**) that occurred only in comparatively small numbers in the area of and at the time of the site's occupation; 2) the Outbuilding represents a "type" of outbuilding on a "type" of farm typically poorly documented in the documentary record, such as those occupied by poorer and often by African American tenants; 3) the Outbuilding also exhibits good architectural integrity such that the architectural, documentary, and archaeological resources supplement and complement each other in the information they contain; 4) the farm also contains extant landscape features such as agricultural fields, or other property types, such as Agricultural Complexes, with excellent integrity that date to the period of the Outbuilding's significance; or 5) the Outbuilding represents a "type" of outbuilding not yet investigated intensively by archaeologists.

#### (2) Representativeness

An Agricultural Outbuilding will be evaluated based on its representativeness of the "types" of outbuildings and farms discussed above under VII. **ARCHAEOLOGICAL RESEARCH QUESTIONS** and V. **HISTORIC CONTEXT NARRATIVE**. Several criteria must be considered in determining representativeness: 1) outbuilding and farm type; 2) geographical zone; 3) temporal period; 4) tenure; 5) economic position of the farm's residents; and 6) changes in the farm's or outbuilding's type over the period of the Outbuilding's occupation. The goal is to study a sample of outbuildings and the farms on which they were located that are both typical and atypical when measured by these criteria. Representativeness is meant to be measured in terms of Agricultural Outbuildings studied archaeologically, in terms of the estimated total universe of Agricultural Outbuildings dating between 1830-1880 and 1880-1940 in each geographical zone, and in terms of the estimated total number of Agricultural Outbuildings dating between 1830-1880 and 1880-1940 in each geographical zone that potentially exhibit archaeological integrity, ie. that have not been destroyed by the phenomena and practices threatening archaeological sites across the state.

### (3) Research Questions

An Agricultural Outbuilding is significant if it can address research questions relating to at least one of the research domains: Domestic Economy; Landscape; Manufacturing and Trade; and Social Group Identity, Behavior, and Interaction. An Agricultural Outbuilding's potential to address research questions must always be measured in the context of the farm of which it was historically a part.

### (4) Association with a Person or Event Significant in Local, Regional, or National History or Culture

Significance under this criterion is closely linked to integrity. In order for an Agricultural Outbuilding to be significant because of its association with a person or event significant in local, regional, or national history or culture, it must contain intact and undisturbed archaeological resources directly associated with the significant person or event.

## **4. Agricultural Quarters**

### a. Criteria for Integrity

#### (1) Physical Integrity

Agricultural Quarters must exhibit integrity in the archaeological expressions of their defining components: dwelling(s), domestic outbuildings, and utilitarian and nonutilitarian landscapes such as formally landscaped and maintained lawns, yards, and gardens; kitchen gardens; work yards; animal pens; wells and other water sources; drives, lanes and paths; and trash and other waste disposal areas and features. Strata, features, soil chemicals, material culture assemblages, and faunal and ethnobotanical remains comprise the archaeological embodiments of these components, of the Quarters' residents' possessions, and of the activities the residents undertook within the Quarters. These must remain intact and substantially undisturbed by activities that post-date the period of significance of the site as an Agricultural Quarter. Intact and undisturbed strata, features, soil chemical signatures, and material culture, faunal, and ethnobotanical assemblages retain their original contextual, functional, and temporal relationships to each other.

For each site, criteria for integrity must be evaluated in conjunction with the criteria for significance. In all cases, a site must exhibit sufficient integrity to allow researchers to address research questions relating to at least one of the four research domains: Domestic Economy; Landscape; Manufacturing and Trade; and Social Group Identity, Behavior, and Interaction. All sites must also exhibit integrity such that they will yield

information that cannot be obtained from other sources. Given the small number of Agricultural Quarters in New Castle and Kent counties, sites with partially compromised integrity will be significant as long as they exhibit sufficient integrity to provide information not available from other sources that relates to one of the research domains.

## (2) Temporal Integrity

Agricultural Quarters exhibit temporal integrity if they either a) represent short-term occupations and exhibit physical integrity relating to the period of occupation, or b) represent long-term occupations and exhibit physical integrity relating to either (1) the occupation of an identifiable period within the overall occupation of the Quarter or (2) the entire period of occupation, such that change within the context of a single property can be explored.

### b. Criteria for Significance

#### (1) Historical Documentation and Oral History

To be determined significant, it is not always necessary for Agricultural Quarters of the 1830-1940 period to be well-documented in primary historical and, for sites of the 1880-1940 period, oral sources. Researchers must, however, search for such documentation. Sites for which sources such as those listed under Associative Characteristics in the section on **PROPERTY TYPES** and others 1) confirm the site's function as an Agricultural Quarter, 2) document the physical components of the site and the farm or residential property of which it was a part, and/or 3) offer demographic, occupational, and other sociocultural information on the Quarter's residents, their occupations, their activities, and their goals and strategies, definitely meet this criterion for significance.

Agricultural Quarters for which historical and/or oral documentation, beyond that confirming the site's property type, does not survive may still be determined significant if 1) the Quarter represents a "type" (see VII. **ARCHAEOLOGICAL RESEARCH QUESTIONS**) that occurred only in comparatively small numbers in the area of and at the time of the site's occupation; 2) the Quarter represents a "type" typically poorly documented in the documentary record, such as those occupied by slaves and migrant workers; 3) the Quarter also exhibits good architectural integrity such that the architectural, documentary, and archaeological resources supplement and complement each other in the information they contain; 4) the Quarter's property also contains extant landscape features or other property types with good integrity that date to the period of the Quarter's significance; or 5) the Quarter represents a "type" not yet investigated intensively by archaeologists.

## (2) Representativeness

An Agricultural Quarter will be evaluated based on its representativeness of the "types" of quarters, farms, and agricultural residential properties discussed above under VII. **ARCHAEOLOGICAL RESEARCH QUESTIONS** and V. **HISTORIC CONTEXT NARRATIVE**. Several criteria must be considered in determining representativeness: 1) quarter, and farm or residential property type; 2) geographical zone; 3) temporal period; 4) tenure; 5) ethnicity; 6) resident's religion; 7) household composition and structure; 8) economic position and legal status of the Quarter's residents; and 9) changes in the farm's or residential property's type over the period of the Quarter's occupation. The goal is to study archaeologically a representative sample of farms, agricultural residential properties, and their component property types, such as Agricultural Quarters, that are both typical and atypical when measured by these criteria. Representativeness is meant to be measured in terms of Agricultural Quarters studied archaeologically, in terms of the estimated total universe of Agricultural Quarters dating between 1830-1880 and 1880-1940 in each geographical zone, and in terms of the estimated total number of Agricultural Quarters dating between 1830-1880 and 1880-1940 in each geographical zone that potentially exhibit archaeological integrity, ie. that have not been destroyed by the phenomena and practices threatening archaeological sites across the state.

## (3) Research Questions

An Agricultural Quarter is significant if it can address research questions relating to at least one of the research domains: Domestic Economy; Landscape; Manufacturing and Trade; and Social Group Identity, Behavior, and Interaction. An Agricultural Quarter's potential to address research questions must always be measured in the context of the farm or property of which it was historically a part.

## (4) Association with a Person or Event Significant in Local, Regional, or National History or Culture

Significance under this criterion is closely linked to integrity. In order for an Agricultural Quarter to be significant because of its association with a person or event significant in local, regional, or national history or culture, it must contain intact and undisturbed archaeological resources directly associated with the significant person or event.

## 5. Agricultural Transport Facilities

### a. Criteria for Integrity

#### (1) Physical Integrity

Agricultural Transport Facilities must exhibit integrity in the archaeological expressions of their defining components: wharves, stores, warehouses, other related outbuildings, boats, and utilitarian landscapes such as work yards; loading and unloading areas, facilities, and structures; storage areas; animal pens; wells and other water sources; drives, lanes and paths; and trash and other waste disposal areas and features. Strata, features, soil chemicals, material culture assemblages, and in some cases faunal and ethnobotanical remains comprise the archaeological embodiments of these components and of the activities undertaken at the Facility. These must remain intact and substantially undisturbed by activities that post-date the period of significance of the site as an Agricultural Transport Facility. Intact and undisturbed strata, features, soil chemical signatures, and material culture, faunal, and ethnobotanical assemblages retain their original contextual, functional, and temporal relationships to each other.

Criteria for integrity must be evaluated in conjunction with the criteria for significance for each site. In all cases, a site must exhibit sufficient integrity to allow researchers to address research questions relating to at least one of the four research domains: Domestic Economy; Landscape; Manufacturing and Trade; and Social Group Identity, Behavior, and Interaction. All sites must also exhibit integrity such that they will yield information that cannot be obtained from other sources. Given the small number of Agricultural Transport Facilities in New Castle and Kent counties that have so far been investigated archaeologically, sites with partially compromised integrity will be significant as long as they exhibit sufficient integrity to provide information not available from other sources that relates to one of the research domains.

#### (2) Temporal Integrity

Agricultural Transport Facilities exhibit temporal integrity if they either a) represent short-term occupations and exhibit physical integrity relating to the period of occupation, or b) represent long-term occupations and exhibit physical integrity relating to either (1) the occupation of an identifiable period within the overall occupation of the Facility or (2) the entire period of occupation, such that change within the context of a single property can be explored.

## b. Criteria for Significance

### (1) Historical Documentation and Oral History

To be determined significant, it is not always necessary for Agricultural Transport Facilities of the 1830-1940 period to be well-documented in primary historical and, for sites of the 1880-1940 period, oral sources. Researchers must always search for such documentation. Sites for which sources such as those listed under Associative Characteristics in the section on **PROPERTY TYPES** and others 1) confirm the site's function as an Agricultural Transport Facility, 2) document the physical components and function of the Transport Facility and the farm of which it was a part, 3) offer demographic, occupational, and other sociocultural information on the farm's residents, and/or 4) provide technological and economic data on the farm's and farmer's products, operation, tools, equipment, agricultural practices, investments, improvements, market and exchange networks, and the like, especially as they relate to the functioning of the Transport Facility, definitely meet this criterion for significance.

Agricultural Transport Facilities for which historical and/or oral documentation, beyond that confirming the site's property type, does not survive may still be determined significant if 1) the Facility represents a "type" (see VII. **ARCHAEOLOGICAL RESEARCH QUESTIONS**) that occurred only in comparatively small numbers in the area of and at the time of the site's occupation; 2) the Facility represents a "type" of Landing Complex on a "type" of farm typically poorly documented in the documentary record; 3) the Transport Facility also exhibits good architectural integrity such that the architectural, documentary, and archaeological resources supplement and complement each other in the information they contain; 4) the farm also contains extant landscape features or other property types with good integrity that date to the period of the Transport Facility's significance; or 5) the Transport Facility represents a "type" not yet investigated intensively by archaeologists.

### (2) Representativeness

An Agricultural Transport Facility will be evaluated based on its representativeness of the "types" of outbuildings, structures, and farms discussed above under VII. **ARCHAEOLOGICAL RESEARCH QUESTIONS** and V. **HISTORIC CONTEXT NARRATIVE**. Several criteria must be considered in determining representativeness: 1) building and structure type; 2) geographical zone; 3) temporal period; 4) tenure; 5) economic position of the farm's residents; and 6) changes in the farm's or facility's type over the period of the Facility's occupation. The goal is to study a sample of Transport Facilities and the farms on which they were located that are both typical and atypical when measured by these criteria. Representativeness is meant to be measured in terms of Agricultural



Transport Facilities studied archaeologically, in terms of the estimated total universe of Agricultural Transport Facilities dating between 1830-1880 and 1880-1940 in each geographical zone, and in terms of the total estimated number of Agricultural Transport Facilities dating between 1830-1880 and 1880-1940 in each geographical zone that potentially exhibit archaeological integrity, ie. that have not been destroyed by the phenomena and practices threatening archaeological sites across the state.

### (3) Research Questions

An Agricultural Transport Facility is significant if it can address research questions relating to at least one of the research domains: Domestic Economy; Landscape; Manufacturing and Trade; and Social Group Identity, Behavior, and Interaction. An Agricultural Transport Facility's potential to address research questions must always be measured in the context of the farm of which it was historically a part.

### (4) Association with a Person or Event Significant in Local, Regional, or National History or Culture

Significance under this criterion is closely linked to integrity. In order for an Agricultural Transport Facility to be significant because of its association with a person or event significant in local, regional, or national history or culture, it must contain intact and undisturbed archaeological resources directly associated with the significant person or event.

## **6. Agricultural Structure**

### a. Criteria for Integrity

#### (1) Physical Integrity

Agricultural Structures must exhibit integrity in the archaeological expressions of their defining components: one or more structures not designed to shelter humans or human activities, along with the outdoor work spaces and yards directly associated with these structures--yards; storage areas; drives, lanes and paths; drainage features; trash and other waste disposal areas and features; and other features associated with the functioning of but external to the structure(s). Strata, features, soil chemicals, material culture assemblages, and depending on the nature of the structure, faunal and ethnobotanical remains comprise the archaeological embodiments of these components and of the activities undertaken around the structure. These must remain intact and substantially undisturbed by activities that post-date the period of significance of the site as an Agricultural Structure. Intact and undisturbed strata, features, soil chemical

signatures, and material culture, faunal, and ethnobotanical assemblages retain their original contextual, functional, and temporal relationships to each other.

For each site, criteria for integrity must be evaluated in conjunction with the criteria for significance. In all cases, a site must exhibit sufficient integrity to allow researchers to address research questions relating to at least one of the four research domains: Domestic Economy; Landscape; Manufacturing and Trade; and Social Group Identity, Behavior, and Interaction. All sites must also exhibit integrity such that they will yield information that cannot be obtained from other sources. Given the small number of Agricultural Structures in New Castle and Kent counties that have so far been investigated archaeologically, sites with partially compromised integrity will be significant as long as they exhibit sufficient integrity to provide information not available from other sources that relates to one of the research domains.

## (2) Temporal Integrity

Agricultural Structures exhibit temporal integrity if they either a) represent short-term occupations and exhibit physical integrity relating to the period of occupation, or b) represent long-term occupations and exhibit physical integrity relating to either (1) the occupation of an identifiable period within the overall occupation of the Structure or (2) the entire period of occupation, such that change within the context of a single property can be explored.

### b. Criteria for Significance

#### (1) Historical Documentation and Oral History

To be determined significant, it is not always necessary for Agricultural Structures of the 1830-1940 period to be well-documented in primary historical and, for sites of the 1880-1940 period, oral sources. Researchers must always search for such documentation. Sites for which sources such as those listed under Associative Characteristics in the section on **PROPERTY TYPES** and others 1) confirm the site's function as an Agricultural Structure, 2) document the physical components and function of the Structure and the farm of which it was a part, 3) offer demographic, occupational, and other sociocultural information on the farm's residents, and 4) provide technological and economic data on the farm's and farmer's products, operation, tools, equipment, agricultural practices, investments, improvements, market and exchange networks, and the like, especially as they relate to the functioning of the Structure, definitely meet this criterion for significance.

Agricultural Structures for which historical and/or oral documentation, beyond that confirming the site's property type, does not survive may still be determined significant if 1) the Structure represents a "type" (see VII. **ARCHAEOLOGICAL RESEARCH QUESTIONS**) that occurred only in comparatively small numbers in the area of and at the time of the site's occupation; 2) the Structure represents a "type" typically poorly documented in the documentary record, such as water towers or other water management structures; 3) the Structure also exhibits good architectural integrity such that the architectural, documentary, and archaeological resources supplement and complement each other in the information they contain; 4) the farm also contains extant landscape features or other property types with good integrity that date to the period of the Structure's significance; or 5) the Structure represents a "type" not yet investigated intensively by archaeologists.

### (2) Representativeness

An Agricultural Structure will be evaluated based on its representativeness of the "types" of structures and farms discussed above under VII. **ARCHAEOLOGICAL RESEARCH QUESTIONS** and V. **HISTORIC CONTEXT NARRATIVE**. Several criteria must be considered in determining representativeness: 1) structure and farm type; 2) geographical zone; 3) temporal period; 4) tenure; 5) economic position of the farm's residents; and 6) changes in the farm's or structure's type over the period of the Structure's occupation. The goal is to study a sample of structures and the farms on which they were located that are both typical and atypical when measured by these criteria. Representativeness is meant to be measured in terms of Agricultural Structures studied archaeologically, in terms of the estimated total universe of Agricultural Structures dating between 1830-1880 and 1880-1940 in each geographical zone, and in terms of the estimated total number of Agricultural Structures dating between 1830-1880 and 1880-1940 in each geographical zone that potentially exhibit archaeological integrity, ie. that have not been destroyed by the phenomena and practices threatening archaeological sites across the state.

### (3) Research Questions

An Agricultural Structure is significant if it can address research questions relating to at least one of the research domains: Domestic Economy; Landscape; Manufacturing and Trade; and Social Group Identity, Behavior, and Interaction. An Agricultural Structure's potential to address research questions must always be measured in the context of the farm of which it was historically a part.

(4) Association with a Person or Event  
Significant in Local, Regional, or  
National History or Culture

Significance under this criterion is closely linked to integrity. In order for an Agricultural Structure to be significant because of its association with a person or event significant in local, regional, or national history or culture, it must contain intact and undisturbed archaeological resources directly associated with the significant person or event.

**7. Agricultural Commercial/Industrial Outbuilding**

a. Criteria for Integrity

(1) Physical Integrity

Agricultural Commercial/Industrial Outbuildings must exhibit integrity in the archaeological expressions of their defining components: commercial or industrial outbuildings and the utilitarian landscapes directly associated with them--work and processing yards; storage areas; animal pens; wells and other water sources; drives, lanes, paths, and other transportation-related features; and trash and other waste disposal areas and features. Strata, features, soil chemicals, material culture assemblages, and faunal and ethnobotanical remains comprise the archaeological embodiments of these components, of the Outbuilding's contents, and of the activities undertaken within the Outbuilding. These must remain intact and substantially undisturbed by activities that post-date the period of significance of the site as an Agricultural Outbuilding. Intact and undisturbed strata, features, soil chemical signatures, and material culture, faunal, and ethnobotanical assemblages retain their original contextual, functional, and temporal relationships to each other.

For each site, criteria for integrity must be evaluated in conjunction with the criteria for significance. In all cases, a site must exhibit sufficient integrity to allow researchers to address research questions relating to at least one of the four research domains: Domestic Economy; Landscape; Manufacturing and Trade; and Social Group Identity, Behavior, and Interaction. All sites must also exhibit integrity such that they will yield information that cannot be obtained from other sources. All sites must also have been located on farms during their period of significance. Since this historic context does not address agricultural processing, industry, and commerce, any further elaboration of integrity criteria will be deferred until such an historic context is developed.

## (2) Temporal Integrity

Agricultural Commercial/ Industrial Outbuildings exhibit temporal integrity if they either a) represent short-term occupations and exhibit physical integrity relating to the period of occupation, or b) represent long-term occupations and exhibit physical integrity relating to either (1) the occupation of an identifiable period within the overall occupation of the Outbuilding or (2) the entire period of occupation, such that change within the context of a single property can be explored.

### b. Criteria for Significance

These criteria may be revised when an historic context is prepared on agricultural processing, industry, and commerce.

#### (1) Historical Documentation and Oral History

To be determined significant, in most cases Agricultural Commercial/ Industrial Outbuildings of the 1830-1940 period must be documented in primary historical and, for sites of the 1880-1940 period, oral sources (see discussion below for the cases in which this requirement may be waived). First, documentary and/or oral information must confirm the site's function as an Agricultural Commercial/ Industrial Outbuilding. Sources such as those listed under Associative Characteristics in the section on **PROPERTY TYPES** and others can provide this confirmation. Second, these sources must also 1) document the physical components and function of the Outbuilding and the farm of which it was a part, 2) offer demographic, occupational, and other sociocultural information on the farm's residents, and/or 3) provide technological and economic data on the farm's and farmer's products, operation, tools, equipment, agricultural practices, investments, improvements, market and exchange networks, and the like, especially as they relate to the Commercial/ Industrial Outbuilding. For the site to be determined significant, documentary information need **not** be available relating to all of these issues. There must, however, be sufficient documentary information to address at least one of the research domains: Domestic Economy; Landscape; Manufacturing and Trade; and Social Group Identity, Behavior, and Interaction. Moreover, at least one document identifying the Outbuilding during its period of significance must be available, some primary historical information must document at least one of the households that occupied the farm during the period of the site's significance (the same period for which the archaeological resources exhibit integrity), and some primary historical documentation must record the commercial or industrial operations of the Outbuilding.

These requirements for historical documentation of an Agricultural Commercial/ Industrial Outbuilding may be waived if 1) the Outbuilding represents a "type" of outbuilding that occurred

only in comparatively small numbers in the area of and at the time of the site's occupation; 2) the Outbuilding represents a "type" of outbuilding on a "type" of farm typically poorly documented in the documentary record, such as those occupied by poorer and often by African American tenants; 3) the Outbuilding also exhibits good architectural integrity such that the architectural, documentary, and archaeological resources supplement and complement each other in the information they contain; 4) the Outbuilding also contains extant landscape features or other property types with excellent integrity that date to the period of the Outbuilding's significance; 5) the Outbuilding represents a "type" of outbuilding not yet investigated intensively by archaeologists; or 6) the Outbuilding and the farm of which it was a part are especially well documented in the oral record.

Oral historical information on Agricultural Commercial/ Industrial Outbuildings dating to the 1880-1940 period must be sought. This information is especially important, as the research carried out to develop this historic context indicates that many Agricultural Commercial/ Industrial Outbuildings of this period may be poorly documented in contemporary written and graphic records. Outbuildings for which good oral history sources exist will meet this criterion of significance.

## (2) Representativeness

An Agricultural Commercial/ Industrial Outbuilding will be evaluated based on its representativeness of the "types" of outbuildings and farms discussed above under VII. **ARCHAEOLOGICAL RESEARCH QUESTIONS** and V. **HISTORIC CONTEXT NARRATIVE**. Several criteria must be considered in determining representativeness: 1) outbuilding and farm type; 2) geographical zone; 3) temporal period; 4) tenure; 5) economic position of the farm's residents; and 6) changes in the farm's or outbuilding's type over the period of the Outbuilding's occupation. The goal is to study a sample of outbuildings and the farms on which they were located that are both typical and atypical when measured by these criteria. Representativeness is meant to be measured in terms of Agricultural Commercial/ Industrial Outbuildings studied archaeologically, in terms of the estimated total universe of Agricultural Commercial/ Industrial Outbuildings dating between 1830-1880 and 1880-1940 in each geographical zone, and in terms of the estimated total number of Agricultural Commercial/ Industrial Outbuildings dating between 1830-1880 and 1880-1940 in each geographical zone that potentially exhibit archaeological integrity, ie. that have not been destroyed by the phenomena and practices threatening archaeological sites across the state.

(3) Research Questions

An Agricultural Commercial/ Industrial Outbuilding is significant if it can address research questions relating to at least one of the research domains: Domestic Economy; Landscape; Manufacturing and Trade; and Social Group Identity, Behavior, and Interaction. An Agricultural Commercial/ Industrial Outbuilding's potential to address research questions must always be measured in the context of the farm of which it was historically a part.

(4) Association with a Person or Event  
Significant in Local, Regional, or  
National History or Culture

Significance under this criterion is closely linked to integrity. In order for an Agricultural Commercial/ Industrial Outbuilding to be significant because of its association with a person or event significant in local, regional, or national history or culture, it must contain intact and undisturbed archaeological resources directly associated with the significant person or event.